

ACSC/DEA/108/96-04

NUCLEAR STRATEGY AND ARMS CONTROL: A COMPARISON

A Research Paper

Presented To

The Directorate of Research

Air Command and Staff College

In Partial Fulfillment of the Graduation Requirements of ACSC

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April 1996

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Preface

During the past five decades, nuclear strategy and arms control have been at the forefront of the national security strategy of the United States (US). Nuclear strategy has continuously evolved as new presidential administrations have taken office, while arms control has continued on the path towards limiting the arms race and reducing the nuclear weapons arsenals of both the US and the former Union of Soviet Socialist Republics (USSR).

In a Cold War environment where national security was paramount, both the US and the former USSR engaged in a costly arms race, building vast nuclear arsenals. Nuclear strategy helped keep the peace while arms control treaties became the mechanism for actual reductions of these vast nuclear arsenals. However, that Cold War environment—a much predictable environment—has changed dramatically for both countries. The USSR has dissolved into 15 new countries while the US has significantly reduced its defense budget. Now nuclear strategy and arms control faces its greatest challenge in this new world environment.

We have analyzed the history of nuclear strategy and arms control treaties and have provided our unclassified analysis in this research paper. Our intent is to provide the reader(s) with in-depth knowledge as to the formation of and the actual nuclear strategy as it evolved during each presidential administration, starting with the Eisenhower Administration and ending with the current Clinton Administration. It will also give the

reader history into the negotiations of key arms control and reduction treaties, the major requirements of each, and provide some conclusions for each treaty. Further, it will reveal the linkages between the actual nuclear strategy and arms control treaties. Lastly, it will provide some recommendations to policy makers to help meet the challenge of the new world environment. After reading, we feel the reader(s) will appreciate and understand the complex, interrelated world of nuclear strategy and arms control treaties.

Abstract

The objective of the research was to determine what, if any, relationship existed between the United States' nuclear weapons employment policy and its arms control policy from the 1950s to the present. Specifically, we sought to determine if one policy was a causal factor for the other, or if the policies evolved in a cooperative manner. The research involved building a comparative chronology of the development and implementation of the two policies. After examining the history it was apparent they are linked in every case. Because the relationship was so variable, it must be described as a function of time; the driving force behind the relationship changed with successive US administrations and as the relative balance of nuclear strength shifted between the US and the Soviet Union. However, running through the decades were two discernible threads. One was that the short term goal for arms control always seemed to be to create an equivalence of capability, and the other was that the long term goal for both employment policy and arms control was to create the appropriate conditions to avoid nuclear war. The conclusion is that long term stability must take priority over short term numerical equivalence.

Chapter 1

Introduction

Thesis

The United States lost its nuclear weapons monopoly in 1949 when the Soviet Union detonated its first nuclear device. Since then, considerations of how to prevent the use of nuclear weapons in any future conflict have occupied center stage of US national security policy. The fundamental tenet of this policy has been to deter war, especially between the nuclear armed states. Believing that any nuclear war would be catastrophic for the participants, the US has sought always to deter aggression so strongly that the nuclear threshold remained too high to be crossed.

The two primary components of US national security policy which deal with the prevention of nuclear war are its nuclear weapons employment strategy and its arms control policies. The purpose of this paper is to examine the relationship between these two components from the 1950s to the present. We will determine to what degree each policy influenced the other and which was dominant in the overall US national security policy. A further goal of the paper is to determine to what extent this relationship is relevant in today's multipolar world and to recommend a suggested approach for US policymakers.

Approach

Our approach was to first construct a chronological history of the evolving nuclear weapons employment strategy. This was done by examining the major changes made by successive presidential administrations as recorded in public statements by the President and the Secretary of Defense, in official reports or testimony to the Congress, and in declassified Presidential and National Security Council memoranda. Because of the need to maintain the unclassified nature of this paper, only the open literature was consulted, and as a consequence the picture painted may (probably will) be incomplete. Although some background is given concerning the 1940s and 50s, the time period covered in this paper essentially starts in 1961, which was when the first nationally directed and coordinated nuclear employment plan went into effect.

Chapter 3 summarizes the most important arms control and arms reduction treaties that have been negotiated and ratified in the last forty years, even though not all have been implemented. In order to limit the scope of the paper, only those treaties with major impact on the nuclear aspect of US national security policy were investigated. The chapter describes the essential tenets of the treaties and provides some of the historical context in which the treaties were negotiated. As the reader will discover, there is a discernible trend which shows an evolution from arms control agreements, which merely seek to limit the numbers or capabilities of weapons possessed by the signatories, to arms reduction agreements, which direct the actual destruction or removal from operational service of significant numbers of weapons and weapon systems.

The analysis proper begins in Chapter 4, where we examine the relationship between nuclear strategy and arms control agreements. In every case we have found a link, but the

driving force behind the relationship has varied widely over time. In other words, at times the strategy was the dominant factor, where treaties were sought to further the strategy, and at other times, the situation was reversed. However, running through the decades were two discernible threads. One was that the short term goal for arms control always seemed to be to create an equivalence of capability, and the other was that the long term goal for both strategy and arms control was to create the appropriate conditions to avoid nuclear war.

Finally, we suggest a course for US policymakers to follow in the future.

Definitions

In order to establish a common frame of reference for the reader, this section presents definitions of the more common terms used by the authors throughout the paper.

Nuclear strategy as a whole refers to a nation's goals and objectives, its plans for weapons employment, and the force structure required to carry out those plans. Within this large umbrella, it is important to note the significant difference between a nation's declaratory policy and its employment strategy. *Declaratory policy* is a nation's publicly stated plan for the use of nuclear weapons in an actual conflict or in the event that conflict is perceived to be imminent, while its *employment strategy* is the actual plan which details the number of weapons, the timing sequence, and the targets selected for attack by the nation's nuclear forces. At times in US history, these two policies have not always been in agreement. Targets are often described as *countervalue*, which is essentially those things that people value the most such as their lives and their homes, and

counterforce, which refers to military capability, and in the context of this paper, refers especially to strategic nuclear forces.

Declaratory and employment policy may each be described as preemptive or retaliatory. A *preemptive* policy assumes that a nation will strike first with nuclear weapons if it believes that a nuclear attack upon itself is imminent. The converse is the *retaliatory* policy, which assumes that a nation will only use nuclear weapons in response to actual nuclear attack.

A nation's *nuclear capability* is its ability to employ nuclear weapons to achieve the goals of its nuclear strategy. This capability can be either offensive or defensive in nature. Offensive nuclear capability is further characterized as being either first-strike or second-strike. Possession of a *first-strike* capability means that a nation is able to destroy another nation's offensive nuclear capability before that capability can be used. Prerequisite to possessing a first-strike capability is to possess a *counterforce capability*, that is, possession of sufficient numbers of deliverable, high accuracy, high nuclear yield weapons to be able to destroy an adversary's strategic nuclear forces, which are usually deployed in dispersed, hardened or mobile launchers. If one possesses only low accuracy or low yield weapons, these will be insufficient to destroy hardened targets, but will still be capable of destroying large, soft targets such as cities. This is referred to as a *countervalue capability*. A *second-strike capability* gives a nation the ability to absorb a nuclear attack and still be able to respond with a devastating nuclear counter-attack. Because the nation which struck first will have expended a good portion of its nuclear weapons, a counterforce response will generally be ineffective, and so second-strike capability need only be sufficient to strike countervalue targets. This second-strike

capability is achieved by deploying either large numbers of weapons, or by deploying highly survivable weapons, or a combination of the two. A second-strike capability may be either counterforce or countervalue, since a counterforce capability is inherently countervalue capable.

Chapter 2

Nuclear Strategy Evolution

Introduction

The nuclear strategy of the United States has undergone considerable evolution since its inception in the 1940s following the second world war. In fact, the strategy has changed with every new presidential administration since the Eisenhower administration. The initial strategies emphasized all-out retaliatory (or even preemptive) nuclear strikes using all available nuclear weapons. As the arsenal grew both in number and capability, the emphasis shifted towards more selective targeting. Eventually, in the 1970s, real progress was made towards moving away from all-out massive strikes towards the use of smaller options which could help control escalation. In the late 1970s a major shift in targeting was made towards attacking those things that were important to the Soviets, rather than attacking those things that Americans thought were important to the Soviets. The Reagan administration introduced an even more radical shift in philosophy by proposing a combined offensive and defensive force structure that would allow a “warwinning” strategy. Presently, because of the change in attitude of the former Soviet Union towards the US, the Clinton administration’s strategy has a broad focus on the world as a whole, rather than being narrowly focused on a single adversary.

Massive Retaliation

The essence of nuclear strategy during the early part of the Eisenhower administration was “massive retaliation,” which was the launching of all available nuclear weapons against the Soviet Union in one massive attack. The strategy had three objectives: BRAVO, DELTA, and ROMEO. The BRAVO objective was to blunt the Soviet ability to deliver an atomic offensive against the US.¹ This mission consisted of attacks on 645 airfields and 25 atomic energy installations.² Critical to the success of this mission was a preemptive attack to catch Soviet aircraft on the ground. This attack would be launched based on intelligence indications that an attack on the US was imminent. In the late 1940s, there was considerable discussion within the Department of Defense and the Joint Chiefs of Staff that a preventive attack, that is, an attack on the Soviets without warning, would be the best way to eliminate their burgeoning nuclear weapons capability. This idea was proscribed by National Security Council (NSC)-68, which stated “The United States cannot therefore engage in war except as a reaction to aggression of so clear and compelling a nature as to bring the overwhelming majority of our people to accept the use of military force.” The objective of DELTA was to disrupt the war-making industries of the Soviet Union and included strikes against 118 cities.³ The third objective, ROMEO, was to retard the advance of Soviet forces into Europe should they choose to invade. This mission was given the lowest priority in terms of allocation of nuclear weapons and was not expected to be very effective.⁴

Despite presidential guidance on general policy, there was no clear, central authority for nuclear weapons employment prior to 1961. Targeting was determined by unified and specified commanders using their assigned forces. Periodic coordination conferences

indicated substantial duplication and consequent risk of fratricide among the attacking forces.⁵ General Twining, Chairman of the Joint Chiefs of Staff (CJCS), in 1959 proposed the creation of an agency that would create a centralized target list and an integrated operational plan for attacking those targets. He proposed the Strategic Air Command be designated as the responsible command, with guidance from JCS and staffed by officers from multiple services. From this proposal, the Joint Strategic Targeting and Planning Staff (JSTPS), was created and it was tasked with preparing the National Strategic Target List (NSTL) and the Single Integrated Operational Plan (SIOP). The Commander in Chief, Strategic Air Command was designated as the head of the JSTPS.⁶ Both the NSTL and the SIOP were developed based on guidance spelled out in the JCS National Strategic Targeting and Attack Policy (NSTAP). The NSTAP was developed from the results of a staff study directed by General Twining which was known as Study No. 2009. Study No. 2009 had looked at which target set, either a military system, an urban-industrial system, or an optimum mix of military and urban-industrial target systems, would provide the best deterrent effect when targeted for retaliatory strikes. The study had concluded that “successful attack of the Optimum-Mix System should result in the US prevailing in a general war.”⁷ Using the conclusions of Study No. 2009 and other considerations, the JCS issued the NSTAP in August 1960, which stated that the objectives of the US nuclear war plan would be

- To destroy or neutralize Sino-Soviet Bloc strategic nuclear capability and primary military and government controls of major importance, and
- To attack the major urban-industrial centers of the Sino-Soviet Bloc to achieve the general level of destruction as indicated in Study No. 2009.⁸

The first plan produced by the JSTPS was SIOP-62, which was approved by the JCS and the Secretary of Defense on December 2, 1960, and was implemented on April 15, 1961. The fundamental strategy of SIOP-62 was to attack the Optimum-Mix Target System.⁹ As a matter of semantics, SIOP-62 contained fourteen options. However, each option called for the delivery of all available weapons against targets in the Soviet Union, China and the satellite communist countries. The difference among the options was the number of targets to be struck, and this was dependent on the degree of generation of US strategic delivery systems. As more units were generated, the target list would be expanded.¹⁰ The intended targets were a mix of military and urban-industrial sites the destruction of which would eliminate the communist bloc nations as a threat to the United States. The plan was essentially all or nothing, as no forces were held in reserve. Because of the collocation of cities with many of the targets, the Joint Chiefs of Staff (JCS) estimated that civilian casualties within the Sino-Soviet Bloc would run between 360 and 425 million.¹¹

Of particular note is that in documents describing Study No. 2009 and SIOP-62, the emphasis is on prevailing in a general nuclear war, not necessarily in deterring that war. The first SIOP did not provide for a means to terminate US nuclear strikes nor did it allow for the preservation of Soviet command and control capabilities, both of which would be essential to ending the war.¹² The implicit assumption is that the conflict would end when the USSR, China, and their satellites had been destroyed.

Controlled Response

President Kennedy was given a detailed briefing on SIOP-62 early in his first year in office. The briefing gave the historical development and the rationale for the plan. The briefer, General Lenmitzer, CJCS, made several points near the end of his briefing that may have influenced the President to adopt a more flexible policy. The first point was that SIOP-62 was designed to be executed as a total plan, employing all available weapons. The second point was that even after this massive strike, and even if the strike was preemptive to a Soviet strike, the CJCS stated that “it would be expected that some portion of the Soviet long-range nuclear force would strike the United States.”¹³

Even before the CJCS briefing to the President, actually “within the first week of taking office . . . ,”¹⁴ Secretary of Defense Robert McNamara had begun a review of US nuclear policy which would eventually direct weapons employment towards a strictly counterforce strategy where strikes against cities were held to a minimum. He also wanted to build real flexibility into the plan by giving the President a range of options covering the spectrum from zero to a few to many weapons. In March 1961, Secretary McNamara directed the JCS and the Assistant Secretary of Defense for International Security Affairs to revise US policy to emphasize counterforce targeting, controlled response (proportional response vice massive retaliation), and the use of pauses in the strikes to allow for negotiations.¹⁵ The results of these studies were incorporated into JCS planning guidance and included the following:

- China and the satellite countries were separated from the USSR for targeting purposes.
- Soviet strategic forces were separated from Soviet cities on U.S. target lists.
- Strategic reserves were to be held by the United States in accordance with the concept of intrawar deterrence.

- U.S. command and control systems were to be protected to allow “controlled response.”
- Soviet command and control was to be preserved, at least in the initial stages of any nuclear exchange.¹⁶

As a result of the new guidance, the JSTPS produced SIOP-63, which became effective on August 1, 1962. The new strategy was a significant departure from SIOP-62’s emphasis on massive destruction of both military and urban-industrial targets throughout the Sino-Soviet Bloc. The new plan (SIOP-63) provided for a spectrum of options which allowed for counterforce targeting to be distinguished from countervalue (cities) targeting. SIOP-63 differentiated among five target sets: (1) Soviet nuclear weapons delivery capability, (2) other Soviet military targets not collocated with urban areas, (3) military targets near cities, (4) Soviet command and control facilities, and (5) urban-industrial targets. The plan also allowed for the withholding of strikes against particular countries such as China or the other satellite countries. Additionally, SIOP-63 provided for initiation of preemptive strikes against the first two targets sets if the US had sufficient strategic warning of an attack on the US by the Soviet Union or China.¹⁷

Secretary McNamara made a number of public pronouncements concerning the new strategy. He emphasized that the US should focus on destroying the enemy’s military forces, not on decimating his population. He believed that this counterforce strategy was the best way to achieve deterrence, and he said so in his FY63 budget submission, “A major mission of the strategic retaliatory forces is to deter war by their capability to destroy the enemy’s war-making capabilities.”¹⁸ He also believed that deterrence was strengthened by the flexibility built into the new plan. The threat of the use of nuclear weapons was more credible if it involved more than a choice between all or nothing,

especially when the “all” choice would invite a devastating response against the US. By giving the President a range of options to choose from, the US could strike military targets in the Soviet Union without inviting a city for city exchange.

Almost immediately after he announced the new counterforce policy in 1962, McNamara began to backpedal. The strategy was publicly criticized for a number of reasons. First, it was seen as the first step towards creating a first-strike capability, that is, where the US could launch an attack at the Soviet Union with a good chance of eliminating its nuclear capability. Because of the motivation for the other side to strike before being disarmed, even the perception (as opposed to the reality) of possessing a first-strike capability would be very destabilizing during a crisis. On the other side of the coin, critics said that the “no-cities” strategy made the US look weak, unwilling to use its nuclear arsenal, and therefore the strategy weakened deterrence. The third reason was that the North Atlantic Treaty Organization (NATO) allies in Europe became concerned that by removing the possibility of a cities for cities exchange between the US and the USSR, it became more likely that a war in Europe would not escalate beyond the use of so-called “tactical” nuclear weapons in Europe. The Europeans were not in favor of anything that would raise the nuclear threshold in the superpowers’ homelands if it meant that the threshold would be lowered in Europe.¹⁹ Perhaps the most important reason for the change in McNamara’s focus was budgetary. He felt that the armed services were using the counterforce strategy as a means to unnecessarily expand US capabilities, specifically, requesting more Minuteman missiles and requesting acquisition of a long-range supersonic bomber with post-strike reconnaissance capability (the RS-70, which never left the prototype stage). To counter these criticisms and to get a better handle on

the generals, Secretary McNamara began to advocate an assured destruction criterion. By this he meant that the US would not necessarily have a counterforce capability, but would have an assured capability to destroy the Soviet Union as a nation. This, of course, was meant to imply that the US would return to a second-strike countervalue targeting policy, in which the cities of the Soviet Union were held at risk.²⁰

Assured Destruction

The Johnson administration was marked by a period of stability in the US nuclear weapons employment policy. In Ball and Richelson's book, a former assistant secretary of defense was quoted as saying, "The SIOP remains essentially unchanged since then [McNamara's Ann Arbor speech of June 15, 1962]. . . . But the targeting philosophy, the options and the order of choice remain unchanged from the McNamara speech."²¹ However, what did change was the declaratory policy. It is important at this point to note the difference between declaratory policy and employment policy. Declaratory policy is the nuclear strategy as publicly announced by the president or by members of his administration in policy statements, testimony before Congress, or public speeches. Employment policy involves plans for the actual use of nuclear weapons.²² These plans essentially consisted of one plan, the SIOP, which was produced by the JSTPS. Because he remained as the secretary of defense under President Johnson, Robert McNamara was able to continue the policies he had started in the Kennedy administration. In essence what happened was that the private policy, i.e., the employment policy, remained a counterforce one as he had designed under President Kennedy, but he was forced by the

factors discussed in the previous paragraph to adapt the declaratory policy to the changing political and economic climate.

The declaratory policy went through a series of changes from 1962 through 1969, at which point the Nixon administration began to study changes to both declaratory and employment policy. Secretary McNamara initially called the new (declaratory) strategy Assured Destruction and Damage Limitation. Assured Destruction referred to a second-strike capability with which the US would be able to inflict unacceptable damage on the Soviet Union even after absorbing an attack by Soviet forces. In his FY66 budget submission, McNamara defined Assured Destruction of an industrialized nation as the destruction of “... one-quarter to one-third of its population and about two-thirds of its industrial capacity....”²³ The Damage Limitation portion of the strategy was supposed to encompass both offensive and defensive measures which would reduce the amount of damage incurred in the US. As time went on, McNamara downplayed and then eventually dropped the Damage Limitation part of the strategy. Defensive measures were too expensive and offensive measures were dependent upon the willingness of the US to strike first in order to destroy Soviet nuclear forces before they could be launched.

Strategic Sufficiency

President Nixon was faced with three problems in the strategic arena when he took office in January of 1972. First, the US commitment of extended deterrence in Europe lacked credibility. This was the policy in which the US would respond to Soviet aggression (especially limited nuclear attacks) in Europe with a nuclear attack against the Soviet Union. Second, the smallest response available to the US in the current SIOP

consisted of many hundreds, perhaps thousands, of nuclear weapons. It was this fact that made the idea of extended deterrence so incredible. Any large scale US attack against the USSR would surely bring a large scale response against the US. Many Europeans believed that the US would not risk devastation of the American homeland merely to stop the Soviets in Europe. President Nixon's third concern was that increases in the Soviet arsenal and deployment of an anti-ballistic missile (ABM) system around Moscow had greatly impaired the US ability to launch an effective counterforce strike.²⁴

Nixon's administration pursued a three-pronged solution to these problems: continuation of a robust force modernization program, arms control initiatives, and development of a more flexible nuclear strategy. Briefly, the first concerned the addition of multiple warhead capability to both land and sea-based intercontinental ballistic missiles, and the second eventuated in the Strategic Arms Limitation Treaty (SALT I), comprised of the 1972 ABM Treaty and Interim Agreement.²⁵ The third area will be explained in greater detail in the following paragraphs.

Henry Kissinger, the national security adviser, issued National Security Study Memorandum 3 (NSSM-3) on the first day of the Nixon administration. NSSM-3 directed a comprehensive review of US military posture and its strategic needs. The result of the study was a repudiation of the large scale nuclear attacks so prevalent in the war plans of previous administrations. Other studies were conducted over the next several years, which finally culminated with the issue of National Security Decision Memorandum 242 (NSDM-242) on January 17, 1974.²⁶ The purpose of NSDM-242 was to "provide more credible deterrence and escalation control."²⁷ The nuclear strategy that was conceived as a result of NSDM-242 had a number of new features designed to

achieve these two purposes. New options were designed which were called Limited Nuclear Options (LNO). Unlike previous so called “limited strikes” that employed nearly a thousand or more weapons, LNOs consisted of only a handful. Additionally, specific “withholds” were developed to protect certain classes of targets, such as urban areas collocated with military targets, political leadership targets, or the industrial base. The withdraws were to be protected, at least early in the conflict, to show the adversary that the US was not engaging in all-out nuclear war. This procedure was designed to control escalation of the conflict and to allow termination to occur, either by negotiation or unilaterally, before the two sides were completely devastated. The withdraws could also be used as bargaining chips to help bring the conflict to an end, as well as to deter the enemy from further strikes. To ensure that this policy had some teeth, the US designated part of its nuclear forces as a secure reserve force, which would be held back for use in strikes against the withdraws, if that became necessary. The secure reserve force was selected from those forces which were thought to be least vulnerable to a counterforce attack by the Soviets.²⁸ Additionally, improvements were made to the command and control system to ensure that these forces could be executed following a limited Soviet attack. In addition to providing escalation control, it was thought that the process of escalation control would also contribute to limiting the damage incurred by the US. By reducing the Soviet incentive to strike massively, the US might be able to conclude a conflict without being severely damaged itself.

An important shift in targeting emphasis was a change from the previous criteria of destruction of 70 percent of the Soviet industrial base to destruction of 70 percent of that portion of the industrial base necessary for economic recovery. This change to a

counterrecovery targeting policy was seen as a way to further deter the Soviets. Not only did the US intend to devastate the Soviet Union, but it intended to do so in a manner which greatly inhibited their ability to recover from that devastation.²⁹

The plan produced by the JSTPS in response to NSDM-242, which was SIOP-5, contained four types of attack options: major attack options, selected attack options, limited attack options, and regional attack options. The targets were divided into four general categories: nuclear forces, conventional forces, military and political leadership, and economic and industrial facilities. SIOP-5 also specifically designated plans for the secure reserve force.³⁰ The regional attack options were limited strikes having theater objectives.³¹ These particular options could be used to strengthen the concept of extended deterrence in Europe. By providing small options that responded to Soviet aggression in Europe without risking a full scale exchange between the homelands of the US and the Soviet Union, the US nuclear threat became more credible.

All told the new strategy was a significant departure from the previous one. Aaron L. Friedberg provided an excellent summation of the new strategy:

Thus, by 1977 the publicly declared U.S. strategy for nuclear war was as follows: In the event that deterrence failed the primary U.S. objective was to control the process of escalation, bringing hostilities to an acceptable close at the lowest level of conflict possible thereby limiting damage to the United States and its allies. If necessary, escalation control and thus damage limitation were to be achieved through the use of limited nuclear options. These options would serve both a military and a political purpose. If escalation control failed the United States would seek to destroy Soviet military, political and economic assets so as to retard the USSR's recovery in the post-war period. Such attacks would also be designed to limit the Soviet Union's ability to retard U.S. recovery.³²

Countervailing Strategy

Jimmy Carter took office in 1977, becoming the second elected president to find himself at a strategic nuclear disadvantage with the Soviet Union. The Soviet modernization drives of the sixties and seventies closed the gap on US technological superiority and overtook the US in sheer number of nuclear warheads.³³ Even with this in mind, Carter felt further reductions of the US nuclear arsenal were possible. He suggested a strategy of minimum deterrence—feeling perhaps a force of 200 warheads deployed on nuclear submarines would be enough to deter a Soviet attack.³⁴ The significant driving force in this assumption was his dismissal of the possibility of limited nuclear war. In August 1977, Carter issued his initial guidance on nuclear strategy in Presidential Directive (PD) 18 (PDs replaced National Security Decision Memoranda and National Security Decision Directives in the Carter administration). PD-18 simply reaffirmed continued use of NSDM-242 and Nuclear Weapon Employment Policy (NUWEP) 1 and directed three studies be conducted concerning strategic matters. These comprehensive reviews focused on nuclear war plans and strategic nuclear targeting.

The most significant of the reviews was the Nuclear Targeting Policy Review. Although comprehensive, this study failed to show anything new or unexpected. However, the study did change Carter's opinion of the need for limited, selective options in nuclear targeting plans. This change led to the continuation of work began by former Secretary of Defense James Schlesinger. Much like Schlesinger, Carter's Secretary of Defense, Harold Brown, felt “essential equivalence” was key to nuclear policy and national prestige.³⁵

As a result of the reviews, Carter's most significant guidance, PD-59, was adopted in July 1980. The directive was the first to avoid mirror-imaging in strategic nuclear targeting, a concept that refers to targeting what is important to you and not your enemy. Instead of targeting military industry and economic targets, this targeting directive emphasized hitting the Soviet leadership's "high value" items—the leadership bunkers and military targets. This was a break away from the Nixon administrations concept of avoiding destruction of the Soviet leadership, a policy which had been intended to limit escalation by preserving Soviet command and control. Technological improvements in both delivery systems and surveillance (space) allowed for increased targeting capability. For the first time, US strategic nuclear forces had the precision required to strike hardened sites as well as the intelligence capabilities to strike relocatable targets. PD-59 also authorized the Secretary of Defense to release a new NUWEP (NUWEP-80).³⁶ This plan lowered the requirement of 70 percent damage to Soviet industry and switched the emphasis from economic recovery to war support facilities. Finally, PD-59 directed the US to develop plans to fight a protracted war. This added the requirements of improving our command, control, and communications (C3) and hardening. Carter stressed the need for a "strategic reserve force" made up of invulnerable missiles that would not be deployed in early stages of a nuclear war. Above all, this directive built in a new degree of flexibility in US nuclear strategy. The strategy broke away from the all-out exchange of nuclear weapons in a quick, violent war to prepare for a staggered, escalating response.

The Carter administration also faced two problems with their declaratory and employment policies—one, as mentioned above, the growing strength of the Soviet nuclear capability and opposing this, a revival of the anti-nuclear movement. The

administration's decisions regarding nuclear policy were received with mixed response by both the military and civilian establishments. Increases in Soviet capability forced the Carter administration to modernize US nuclear weapon systems. The glaring vulnerability of the ICBM force helped push development of the MX ICBM, a mobile railied MIRV system.³⁷ In addition, part of Carter's employment policy was the decision not to deploy the neutron bomb, an enhanced radiation weapon. This action helped to calm anti-nuclear protesters. However, his decision (following NATO's approval) to deploy 572 Tomahawk and Pershing 2 ballistic missiles into five European countries energized the anti-nuclear movement. Strategically, these decisions helped add further flexibility to the response options available in a nuclear exchange.

Overall, the Carter administration's top to bottom scrub on nuclear policy and strategy added a large degree of flexibility to US nuclear plans. The changes in targeting focusing on Soviet leaderships' high value items is a page out of Sun Tsu's Art of War—know your enemy and know yourself. Where Carter's policy and strategy failed was his neglect to consider nuclear strategy from a mindset of a warfighter. The administration's focus was on deterrence and little thought was given to nuclear strategy. Also, strategy focused on current US capabilities opposing current Soviet nuclear forces. This was a continuation of past administrations' failure to use vision with policies as well as with development of capabilities. The Carter administration was at a strategic disadvantage and needed to develop a long-term approach to eliminating to gap between the superpower's strategic nuclear capabilities.

Prevailing Strategy

When Ronald Reagan took office in 1981, he brought with him the philosophy of a strong national defense. He faced a growing anti-nuclear movement that began in the late 1970s. The paper, “Call to Halt the Nuclear Arms Race,” drafted by Randall Forsberg in April 1980, was the driving force behind a nuclear freeze movement.³⁸ Although this movement did not deter Reagan’s efforts with nuclear policy and strategy, it did cloud the public’s perception of the objectives of those policies.

In October 1981, President Reagan issued National Security Decision Directive (NSDD) 13 to replace PD-59. This directive went beyond PD-59 by requiring the capability to prevail in a conflict that could last up to 180 days.³⁹ As a result, Secretary of Defense Casper Weinberger issued NUWEP-82 replacing NUWEP-80.⁴⁰ Although at first glance, these new directives didn’t seem to differ much from the Carter administration’s nuclear policy directives, there was however a significant change below the surface. Emphasis was now shifting from building a strategy of how to deter a nuclear war to building a strategy designed to take over if deterrence should fail. This policy generated two efforts, one directed at linking conventional strategy to nuclear strategy while the other emphasized modernization.

Although much of the targeting philosophy prior to the Reagan Administration was sound, little regard was taken for how the US would enter into a nuclear exchange. An indication that the Reagan Administration emphasized policies addressing how to handle escalation was found in Secretary of Defense Casper Weinberger First Annual Report.

He stated:

It is the purpose of our nuclear forces and strategy to prevent nuclear attack in all possible contexts and from all possible causes. We can never neglect the risk of a surprise attack “out of the blue;” a risk that imposes severe requirements on the survivability of our retaliatory forces and our supporting of command, control, and communications systems. However, we also must be prepared to strengthen nuclear deterrence during a period of heightened danger, in particular during a conventional war. In such a crisis, we can decrease the vulnerability of our strategic forces through increased readiness, dispersal, airborne alert, and other measures.⁴¹

This statement, when compared to a quote by Secretary Brown “mutual strategic deterrence and essential equivalence are in effect”⁴², shows a shift to the operational art of fighting a nuclear war. The Reagan Administration’s strategy does not treat strategic nuclear forces as if they would be employed in a vacuum. NUWEP-82 continued the targeting strategy of focusing on Soviet “high value” items that began in the Carter Administration.⁴³ In addition, the range of options available in an exchange were expanded with suboptions withholding population centers, national command and control, countries, and territories. The intent of these withholdings was to limit escalation in a conflict. This thought process of how to fight a nuclear war lead to a push for modernization.

The Soviet buildup in the 1960s and 1970s led to an increasing amount of US anxiety. In response, the Reagan administration launched a modernization program to improve current US capabilities and increase flexibility in order to complicate Soviet planning efforts. President Reagan sustained President Carter’s procurement of MX ICBMs, Trident Delta 5 SLBMs, ALCMs, submarine and surface launched cruise missiles, and the B-1 Bomber.⁴⁴ These weapon systems coupled with the decision to deploy Pershing II intermediate range ballistic missiles in Western Europe (NATO 572) essentially closed the gap on Soviet superiority.⁴⁵

In support of offensive systems, the administration began efforts on the Strategic Defense Initiative (SDI). This system was met by positive and negative response internally and abroad. The scientific community was split on the desirability of such a system. Many scientists felt the same as former Secretary of Defense Robert McNamara, stating the US must choose between arms control and SDI.⁴⁶ The Soviet leadership's response was also hostile citing it as a violation to the 1972 ABM Treaty and linking it to arms control talks.⁴⁷ This reaction was thought to have added some degree of desirability to SDI.

The actions taken by the Reagan Administration had a significant impact on the Soviet Union. It is the opinion of many people that his aggressive upgrade of US military capabilities invigorated the drive for arms reduction talks. In addition, the December 7, 1988, announcement by General Secretary Mikhail Gorbachev of the unilateral reduction of 500,000 men from the armed forces foretold of the massive changes in the world that were about to take place.

President George Bush took office in 1989 and continued the policies and strategy initiated by the Reagan Administration. Secretary of Defense Dick Cheney continued to stress the tie between nuclear and conventional warfare. Secretary Cheney's statement in the 1990 Report of the Secretary of Defense to the President and the Congress emphasized this strategy.

To keep a flexible response strategy truly effective, the President must have a wide range of retaliatory options, including nuclear ones. To help deter both conventional and limited nuclear attacks, the US must have a range of militarily effective, but nevertheless discrete and recognizable, nuclear responses.⁴⁸

The consistency between administrations was also evident in the lack of official guidance issued by the Bush Administration. NSDD-13 and NUWEP-82 remained as the National Command Authority's current guidance. However, the changes in the international environment beginning with the fall of the Berlin Wall in 1989 would have a colossal impact on nuclear strategy and policy.

With the collapse of the Soviet Union, President Bush faced a radically changed world. The economic failure and split of the former Soviet Union accelerated the changes in posture begun by Mikhail Gorbachev. This environment brought strategic stability between the US and former Soviet Union to an all-time high. A strong defense generated from the US modernization efforts in the 1980s also provided the US the leverage it needed to pursue strategic arms reduction talks (START I & II) as well as the ability to act unilaterally in arms reduction. In September 1991, the president announced the elimination of the entire inventory of ground launched tactical nuclear weapons, the removal of strategic bombers from alert, and the standdown of 450 Minuteman II ICBMs.⁴⁹ Other actions such as the cancellation of the Peacekeeper Rail Garrison program and the mobile basing option of the small ICBM were just some of the indications of a new strategic direction. A clear indication of the change in nuclear policy and strategy was the reduced emphasis of nuclear weapons in the Secretary of Defense's Annual Report—a section which averaged 7–8 pages in the 1980s took only 1 page in 1993. The strategic nuclear direction clearly shifted towards arms reductions and began a renewed focus on nonproliferation issues.

Lead But Hedge—Cooperative Threat Reduction

In October of 1993, President Clinton's administration directed the first Nuclear Posture Review (NPR) in 15 years. This review was promised to be a “bottom-up” review of nuclear policy, doctrine, force structure, operations, safety and security and arms control—similar to the “bottom-up” review of conventional military forces undertaken in summer of 1993.⁵⁰

Although the results of the NPR were somewhat controversial, its offspring, Presidential Review Directive 34, set the direction of US nuclear policy for the foreseeable future. The overriding nuclear strategy for the Clinton Administration became “Lead but Hedge.” It was a two-pronged policy directing slight cuts in US strategic forces while slowing the overall arms reduction process and leaving the option for a build-up should the international environment change.⁵¹ Secretary of Defense William Perry summarized the results of the NPR during a press conference on September 22, 1994. “The new posture...is no longer based on Mutual Assured Destruction, no longer based on MAD. We have coined a new word for our new posture which we call Mutual Assured Safety, or MAS.”⁵²{8,80}

Continuing the policy established by the Bush Administration, the Clinton Administration began to direct its strategy towards arms reduction. The cuts in strategic forces recommended by the review were approved by President Clinton. The reductions included dropping the ICBM force to 450–500 single warhead ICBMs, dropping the B-52 strategic bomber force to 66 aircraft, and eliminating all C4 Trident 1 SLBMs.⁵³ These levels were consistent with the already approved arms control treaties (START I &

II). The reductions were made to show the US intent to take the lead in arms reduction, paving the way for the former Soviet Union to follow suit.

The “Hedge” from “Lead but Hedge,” was a result of the slow drawdown of the former Soviet Union’s nuclear force as well as its continued pursuit of new weapon systems. Ashton B. Carter, Assistant Secretary of Defense for International Security Affairs, summarized the meaning of Hedge: “We wanted to show leadership in eliminating nuclear weapons, but we didn’t want to presume the outcome of history not yet written.”⁵⁴

Although the US would reduce its strategic forces, it planned to put a hold on any further unilateral reductions. In addition, the US would continue the procurement of 20 B-2 long-range stealth bombers and increase its D5 Trident 2 SLBM inventory to 336. It was clear the intent of the “Lead but Hedge” was a cautious push towards reduction of nuclear forces. “Hedge” stressed the need for a capability to quickly build-up our nuclear forces should possible tensions or reversals in Russian policy occur.

Other activities impacting nuclear policy highlighted the new relationship between the former Soviet Union and the US. The Nunn-Lugar Cooperative Threat Reduction program was created to assist the new Independent States in destroying and dismantling weapons of mass destruction (WMD) assets to prevent proliferation.⁵⁵ Also, US and Russian weapons are no longer aimed at any country. These activities and others were designed to promote a partnership and increased trust in a new international setting. If successful, the result could be the most stable strategic environment since the end of World War II.

Notes

¹ Scott D. Sagan, *Moving Targets: Nuclear Strategy and National Security*. (Princeton, NJ: Princeton University Press, 1989), 19.

² Sagan, *Moving Targets*, 23.

³ Sagan, *Moving Targets*, 19–23.

⁴ Sagan, *Moving Targets*, 20.

⁵ David Alan Rosenberg, “The Origins of Overkill: Nuclear Weapons and American Strategy, 1945–1960” *Strategy and Nuclear Deterrence*, edited by Steven E. Miller. (Princeton, NJ: Princeton University Press, 1984), 171.

⁶ Rosenberg, “The Origins of Overkill . . .,” 175.

⁷ Scott D. Sagan, “SIOP-62: The Nuclear War Plan Briefing to President Kennedy,” *International Security*, 12:1 (Summer 1987), 43.

⁸ Sagan, “SIOP-62 . . .,” 43–44.

⁹ Sagan, “SIOP-62 . . .,” 49.

¹⁰ Rosenberg, “The Origins of Overkill . . .,” 25.

¹¹ Desmond Ball, “The Development of the SIOP, 1960–1983,” in *Strategic Nuclear Targeting*, ed. Desmond Ball and Jeffrey Richelson (Ithaca, NY: Cornell University Press, 1986), 62.

¹² Ball, 62.

¹³ Sagan, “SIOP-62 . . .,” 50.

¹⁴ Ball, 62.

¹⁵ Ball, 63.

¹⁶ Ball, 63.

¹⁷ Ball, 62.

¹⁸ Aaron L. Friedberg, “A History of the U.S. Strategic ‘Doctrine’—1945 to 1980” *The Journal of Strategic Studies*, 3:3, 42.

¹⁹ Friedberg, 49.

²⁰ Ball, 68.

²¹ Ball, 70.

²² Richard A. Paulsen, *The Role of US Nuclear Weapons in the Post–Cold War Era*. (Maxwell AFB, AL: Air University Press, 1994), xvi.

²³ Ball, 69.

²⁴ Paulsen, 11.

²⁵ Paulsen, 11.

²⁶ Ball, 73.

²⁷ Paulsen, 12.

²⁸ Ball, 73.

²⁹ Ball, 74.

³⁰ Paulsen, 13.

³¹ Friedberg, 57.

³² Friedberg, 58.

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³³ Peter Vincent Pry, *The Strategic Nuclear Balance Vol. 1: And Why It Matters* (New York, NY: Taylor & Francis New York Inc., 1990), 46.

³⁴ Paulsen, 13.

³⁵ Lawrence Freedman, *The Evolution of Nuclear Strategy* (New York, NY: St. Martin's Press, Inc., 1989), 369.

³⁶ Paulsen, 14.

³⁷ Freedman, 392.

³⁸ Freedman, 402.

³⁹ Paulsen, 15.

⁴⁰ Paulsen, 15.

⁴¹ Casper Weinberger, *Statement of Secretary of Defense Robert S. McNamara before the House Armed Services Committee on the Fiscal Year 1983–87 Defense Program and 1983 Defense Budget*, (Washington, DC, U.S. Government Printing Office, 1983), 89.

⁴² Harold Brown, *Statement of Secretary of Defense Harold Brown before the House Armed Services Committee on the Fiscal Year 1979–83 Defense Program and 1979 Defense Budget*, (Washington, DC, U.S. Government Printing Office, 1979), 4.

⁴³ Paulsen, 15.

⁴⁴ Freedman, 406.

⁴⁵ Stephen J. Cimbala, *Rethinking Nuclear Strategy*. (Wilmington, DE: Scholarly Resources Inc., 1988), xiii.

⁴⁶ Stephen J. Cimbala, *Nuclear War and Nuclear Strategy: Unfinished Business*. (Westport, CN: Greenwood Press Inc., 1987), 100.

⁴⁷ Freedman, 416.

⁴⁸ Dick Cheney, *Statement of Secretary of Defense Dick Cheney before the House Armed Services Committee on the Fiscal Year 1990–94 Defense Program and 1990 Defense Budget*, (Washington, DC, U.S. Government Printing Office, 1990), 32.

⁴⁹ Dick Cheney, *Statement of Secretary of Defense Dick Cheney before the House Armed Services Committee on the Fiscal Year 1992–96 Defense Program and 1992 Defense Budget*, (Washington, DC, U.S. Government Printing Office, 1992), 59.

⁵⁰ Les Aspin, *Statement of Secretary of Defense Les Aspin before the House Armed Services Committee on the Fiscal Year 1993–97 Defense Program and 1993 Defense Budget*, (Washington, DC, U.S. Government Printing Office, 1993), 7.

⁵¹ Bill Gertz, *The New Nuclear Policy: Lead but Hedge*, (Air Force Magazine, Volume 78, No. 1, Jan 1995), 34.

⁵² Michael R. Boldrick, *The Nuclear Posture Review: Liabilities and Risk*. (Parqmetrs: US Army College Quarterly, Volume XXV, No. 4, Winter 1995–96), 100.

⁵³ Gertz, 36.

⁵⁴ Gertz, 35.

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⁵⁵ William Perry, *Statement of Secretary of Defense William Perry before the House Armed Services Committee on the Fiscal Year 1995–99 Defense Program and 1995 Defense Budget*, (Washington, DC, U.S. Government Printing Office, 1995), 8.

Chapter 3

Arms Control Treaties

Introduction

Few events in the history of mankind have required the expenditure of tremendous intellectual and political effort as nuclear arms control treaties. Seizing on the destructive power of nuclear weapons, the two superpowers began an expensive and destabilizing arms race that brought the world to a one-time brink of nuclear war during the 1962 Cuban Missile Crisis. Just recently, the nuclear weapons arsenals of the two superpowers contained many more times the power needed for destruction of each country. Thus, a mechanism was needed to slow the arms race as well as result in verifiable reductions in nuclear weapons in order for each country to retain a credible deterrent posture. Nuclear arms control treaties became the mechanism to accomplish that objective. Negotiated usually at the highest levels of government and ratified by each country's legislative body, they become the legally binding document for arms control and arms reduction.

This chapter details information on arms control and arms reduction treaties. Arms control treaties are those treaties that limit offensive weapons whereas arms reduction treaties result in actual reductions of nuclear weapons. We begin with the treaty that led to both arms control treaties and subsequent arms reductions treaties.

Nonproliferation Treaty (NPT)

The prospect of additional nations acquiring nuclear weapons capabilities raised concern at the national level, as nuclear weapons proliferation would result in three-fold changes. First, there would be profound changes in the role of these weapons in world affairs. Second, relations between both nuclear and non-nuclear weapons states would be changed. Lastly, there would be an increased possibility of nuclear war.¹ A world containing more nations possessing nuclear weapons would result in a less secure, desirable, and stable international environment.² Thus, a mechanism was needed to prevent further proliferation of nuclear weapons capabilities.

The mechanism debated by the United Nations (UN) was a worldwide treaty on nuclear nonproliferation. Potential benefits of a nonproliferation treaty would be three-fold. First, the US and the world would reduce the risk of accidental outbreak of nuclear war by stopping proliferation. Second, the risk for the outbreak of small nuclear wars which could escalate into big nuclear wars would also be reduced. Third, proliferation of nuclear weapons would significantly alter the power balance in a way in which the US could not even predict.³

Debate in the US revealed differing views on proliferation. One view was that selective proliferation might be a good idea as it would relieve the US of some of its defense burdens. The other view was prohibiting proliferation of nuclear weapons and capabilities to additional states would be a loss in the superpower status of the US, which in turn increased the possibility of nuclear war. Thus, common sense applied as to the need to prevent and eliminate nuclear proliferation, and the US supporting a mechanism to do just this.⁴

On June 12, 1968, the UN General Assembly adopted by a 95-4 vote (with 21 abstentions) a resolution recommending a joint US-USSR draft treaty on the nonproliferation of nuclear weapons. The draft treaty was submitted to the UN General Assembly on March 14, 1968, by a conference of the 18-nation Disarmament Committee in Geneva following six years of debate in the Disarmament Conference.⁵

The US Senate Committee on Foreign Relations took immediate action by commencing ratification hearings less than one day after President Johnson submitted it to Congress. Testimony for ratification began on July 10, 1968. Testifying before the Committee were the Secretary of State, the Director of the Arms Control and Disarmament Agency (ACDA), the Deputy Secretary for Defense, the Chairman of the Joint Chiefs of Staff, Chairman of the Atomic Energy Commission (AEC), and others. Due to Senate failure to take action after the July 1968 hearings, the treaty was referred back to the Committee on January 3, 1969, and hearings resumed to obtain the views of the new Nixon Administration. Nixon Administration personnel such as Secretary of State William P. Rogers, ACDA Director Gerald C. Smith, provided testimony in support of the treaty.

Nonproliferation during this time was a foreign policy objective, and the motivation behind the NPT was stated by Secretary of State Herter at the first day of hearings, “The more nations have the power to trigger off a nuclear war, the greater the chance that some nation might use this power in haste or blind folly.”⁶

At the ratification hearings, several committee members raised significant concerns to members testifying before the committee. Key concerns as well as answers provided by testifying members are provided below.

Would ratification of the NPT commit the US to additional responsibilities for world security? Secretary of State Dean Rusk answered that the US did not incur any additional responsibilities. In accordance with Article 24 of its charter, member states of the UN confer primary responsibility for the maintenance of international peace and security upon the Security Council.⁷

Would the US become the world's sole guarantor against nuclear blackmail? Secretary Rusk answered that the US would not become the world's sole guarantor. Again, the UN Security Council was the avenue for maintenance of international peace and security.⁸

Would the NPT expand any extent existing US treaty obligations to go to the defense of any nations which with the US has bilateral defense treaties? Secretary Rusk answered that the NPT would not expand US defense obligations.

Would the NPT prohibit the US from maintaining its nuclear weapons in other countries as long as they were owned and controlled by the US government? General Earle E. Wheeler, Chairman of the Joint Chiefs of Staff, answered that the US was not prohibited from maintaining its nuclear weapons in other countries.⁹

General Wheeler stated "the Joint Chiefs of Staff are in agreement with the expressed objectives of this treaty and support ratification of the treaty as not inimical to US security interests."¹⁰ In answering further concerns from other committee members that there is absolutely nothing in this treaty that is of a disadvantage to US in a military sense, General Wheeler responded that this was true to the best of his beliefs.¹¹

Testimony from Deputy Secretary of Defense Paul H. Nitze indicated that he determined the NPT did not adversely affect US ability to meet current mutual defense obligations.¹² Both he and the Chairman of the AEC supported the treaty.¹³

However, Congressman Craig Hosmer from California, believed that the US role as world policeman would be increased, stating, "Presently, we have security arrangements with about 40 countries. The NPT will extend it to about 60 or more. It will thus increase our opportunities to get involved in someone else's troubles by 250 percent."¹⁴

On March 13, 1969, after a total of six days of hearings, the Senate ratified the NPT, voting 83-15. President Nixon signed the ratification document on November 24, 1969, which was the same day the USSR ratified the treaty.¹⁵ The NPT entered into force on March 5, 1970, when the instruments of ratification were deposited by the US and USSR at ceremonies in Washington, Moscow, and London, which were attended by President Nixon, Soviet Prime Minister Alexei Kosygin, and British Prime Minister Harold Wilson.¹⁶ Key articles of the NPT are provided below.

Article I expressly prohibited the transfer of nuclear weapons or other nuclear explosive devices (including devices for peaceful nuclear explosions) to any state, whether a signatory to the NPT or not, whether a nuclear state or not, or directly or indirectly through an alliance. It also prohibited nuclear-weapon states to assist non-nuclear weapon states in acquiring nuclear weapons or devices.

Article II expressly prohibited non-nuclear weapons states that are parties to the treaty to receive, control, and manufacture nuclear weapons, devices, and explosives or seek and receive assistance to manufacture nuclear weapons or devices.¹⁷

Article III was the “meat” article of the NPT. Section 1 established International Atomic Energy Agency (IAEA) safeguards on all peaceful nuclear activities as the verification system to which all non-nuclear weapons states must subject themselves, with the view to preventing diversion of nuclear energy from peaceful purposes to nuclear weapon or devices. Section 2 specified that no state party to the treaty may provide supplies of fissionable material or equipment to any non-nuclear weapon state unless the state receiving the material accepts the IAEA safeguards required by the treaty.¹⁸

Article VI provided the foundation for arms control and arms reduction. It specified that all parties to the treaty pursue negotiations in good faith on effective measures for nuclear disarmament. Obviously, this section applied to nuclear weapon states more than it did non-nuclear states.¹⁹ Non-nuclear states interpreted this to mean that states surrendering a nuclear weapons potential could expect the nuclear powers to reduce their nuclear arsenals.²⁰ Many countries could question whether their action to give up this potential was worth maintaining if nuclear weapons state did not initiate good faith negotiations for arsenal reduction.²¹

Conclusions on the NPT

Nuclear weapons proliferation has enhanced rather than diminished the effects and importance of the NPT. As countries gain the capability to produce nuclear power, adherence to the NPT may become the only guarantee that power production capability will not be transferred for the development of nuclear weapons.

The NPT was the first treaty in which verbiage specified nuclear disarmament. In declaring that the US government would initiate and vigorously pursue negotiations to

halt the nuclear arms race and reduce existing stockpiles, President Johnson stated in his June 12, 1968, address to the UN General Assembly,

The non-nuclear states are entitled to the assurance that the USA and the Soviet Union will lose no time in finding the way to scale down the nuclear arms race. We desire to begin early discussions on the limitations of strategic offensive and defensive nuclear weapon systems. We shall search for an agreement that will not only avoid another costly and futile escalation of the arms race, but will de-escalate it.²²

The NPT reflected two distinctions between nations that make up the nuclear hierarchy. The first was that the treaty distinguished between those states that possess nuclear weapons and those that do not. The NPT was not responsible for dividing the world into nuclear and non-nuclear states; it only formalized an existing partition. The US and USSR were the key treaty negotiators and have persuaded other nuclear and non-nuclear states to sign the treaty. The second distinction was that the treaty was designed to perpetuate the first distinction, which was to prevent non-nuclear weapons states from becoming nuclear weapons states.²³

The treaty hoped to stabilize the nuclear regime in two main ways. The overwhelming nuclear arsenals of the US and USSR over other nuclear weapons states enabled the US and USSR to contain conflicts, as both countries did not want conflicts to escalate to nuclear exchanges. If other nuclear weapons states began to approach nuclear parity with the two superpowers, the US and USSR might have become less able to manage these new states, allowing international conflicts to become less manageable and quickly escalate to nuclear war. The second way that the growth of nuclear arsenals could affect the regime dealt in the strategic realm. Another state whose nuclear arsenal

reached rough parity with the arsenals of the US and USSR would have undoubtedly upset the present bipolar equilibrium of the two superpowers.²⁴

Ultimately, the NPT did not impact the US and USSR as much as did other states. Concerns and opposition from non-nuclear states were raised such that the US and USSR agreed to insert verbiage such as Article VI which required parties to pursue good faith negotiations for disarmament. Unfortunately, in the first twenty years following the signing of the NPT, the exact opposite happened as the nuclear stockpiles of the US and USSR increased tremendously. It can be said that the strategic arms limitations talks (SALT) were consistent with the intent of Article VI, but stating that Article VI has been an inducement of the superpowers to initiate real reduction negotiations is not correct.²⁵ Even after the signing of both the Strategic Arms Reduction Treaties (START) I and II, it is more correct to state that national self-interest, not the requirement for good faith negotiations as required by Article VI, was the dominant factor of the NPT.

Strategic Arms Limitation Treaty I (SALT I)

In November 1966, President Johnson learned that the Soviets had begun to deploy around Moscow an antiballistic missile (ABM) system, known as Galosh, which provided limited defense against US ballistic missiles. Once Congress learned of the Soviet deployment, it pressured Johnson to deploy a US ABM system. Johnson faced a tough decision to either follow through on deploying a US ABM system or negotiate an agreement with the Soviets to ban ABMs.²⁶

In December 1966, President Johnson instructed US Ambassador to the Soviet Union Llewellyn Thompson to subtly test Soviet opinion towards bilateral arms talks. Johnson

had been persuaded by Secretary of Defense Robert McNamara that there was a danger of an ABM race between the US and USSR that would lead to a new and costly offensive arms race. He felt USSR defensive capabilities would be destabilizing to the US and its retaliatory capabilities in case of a Soviet first strike.²⁷ In September 1967, McNamara announced the administration had decided to deploy a “thin” ABM system, known as Sentinel, to protect the US from a Chinese or third party accidental attack, while rejecting the notion that a “thick” ABM system could limit damage from a Soviet attack (it would never stop all incoming Soviet missiles).²⁸

The idea of using ABM as a bargaining chip for arms control gained credence during the 1968 congressional debate on the Sentinel ABM system. As the Soviet position on defenses began to turn, Soviet Foreign Minister Andrei Gromyko announced that the Soviets in June 1968 were ready for “an exchange of opinion” on limiting strategic arms, which now included ABMs.²⁹ However, the talks were postponed due to the Soviet invasion of Czechoslovakia on August 20, 1968.³⁰

During this time, US political and military leaders objected to the idea of nuclear parity, given the US history of superiority. President Nixon came into office liking the US history of superiority, stating “... it appears that the closer we approach strategic parity, the further we move from a stable peace.”³¹ Thus, he intended to negotiate with the Soviets from a position of superiority. After 1972, however, reality was that the arsenals of the superpowers were numerically equivalent, leading to the US negotiating from a position of parity.

Nixon was convinced that arms control would help accomplish two key US objectives. First, arms control would exert a positive influence on restraining Soviet

behavior. Second, Nixon would link further reduction talks such as the Strategic Arms Limitation Talks to favorable Soviet behavior in the Middle East, Vietnam, and other areas.³² Yet Nixon didn't immediately delve into talks with the Soviets for two key reasons. First, the US was no longer in danger as the Soviets halted construction of other ABM sites, and second, the Soviets became worried about ABMs and wanted to establish some type of limits on ABMs.

Finally, on October 25, 1969, Moscow and Washington established the start of the strategic arms limitation talks (SALT), with a start date of November 17, 1969, in Helsinki. Two and one-half years would elapse before the US and USSR finally signed documents banning ABMs and freezing offensive arms.³³

Public attitudes about ABMs also began to change. Opposition in Congress began to mount due to the technical limitations of the 1970s and high costs of development and deployment. Several congressmen opposed the deployment of sites near certain areas of the country. Congress now saw ABM limitations as a prime opportunity to initiate action to stop the arms race.³⁴ While the US sought to limit both ABMs and offensive weapons, the USSR first agreed to only discuss ABMs but later added offensive weapons as part of the negotiations.³⁵

Negotiations proved difficult for several reasons. The force structure of each side was both different and asymmetrical. While the USSR's arsenal was mainly land-based missile, US forces were primarily sea-based missiles and heavy bombers. The Soviets wanted to exclude its bombers and missiles targeted on the US, while including British and French nuclear systems based in Europe that could strike Soviet territory. The US, however, only wanted to include intercontinental range systems.

Eventually, the Soviets agreed to restrict negotiations to intercontinental range systems. Forward based systems and bomber aircraft, which the US had a decided advantage, were excluded from SALT limitations. Based upon this exclusion, the Soviets believed they had received US concurrence for unequal limits of strategic nuclear delivery vehicles. Additionally, neither the US nor USSR pushed for limits on MIRVed missiles, which again the US had a considerable lead. Both these issues were tabled for follow-on SALT talks.³⁶

The US negotiating position on limiting ABMs changed frequently during the three years of talks. Each party had difficulties reaching acceptable limits of the number of systems; the USSR had deployed a single site around Moscow while the US deployed none, but planned to build a number of sites to protect land-based missile sites.³⁷

Initially, the US focused on equal limits of ABM sites, with each country allowed one ABM site to defend their capital. But the Nixon Administration quickly retreated from this position when the Soviets accepted it, in part because it would be difficult, if not impossible, to secure funding from Congress to switch from defending silos to defending the population. Thus, the Soviets continued to operate their one site while the US, because of domestic problems, might have to settle for no sites at all. Other alternative approaches were disregarded by the Nixon Administration during 1970 and 1971, including a ban all ABM sites. President Nixon abandoned this approach on the grounds that a ban would require the Soviets to dismantle their site which they were not going to do, and his desire to not turn his back on congressional allies who supported him during the fight to obtain funding for an ABM system.³⁸

Further, US negotiations attempted to obtain a numerical advantage in sites over the Soviets. The Soviets rejected all arguments on the basis that the US position resulted in the defense of land-based missile sites whereas the Soviet ABM site was just for the defense of Moscow.³⁹

During the negotiations, the Soviets attempted several new ideas from their perspective. In 1971, they proposed a limit of each side to two sites, with one site to protect the capital and an ICBM site. The US rejected this proposal on the grounds as it was not ready to accept equal numbers of ABMs until it was sure it could get an agreement on offensive systems. Plus, the US believed that this would resurrect the option of protecting Washington, DC. This arrangement would lead to the Soviets having two sites while the US would only have one site.⁴⁰

Further negotiations ended in unacceptable proposals and counterproposals. Finally, after the Soviets agreed to include SLBMs in future negotiations, Secretary of State Henry Kissinger and General Secretary Brezhnev in April 1972, agreed to the Soviet proposal for two sites (ultimately, the Soviets never built the second site).⁴¹

On May 26, 1972, in Moscow, President Nixon and General Secretary Brezhnev signed the ABM Treaty, the Interim Agreement on Offensive Arms, and a Protocol on the Interim Agreement, collectively known as SALT I Treaty.⁴² On August 3, 1972, the Senate voted 88-2 for ratification of the ABM Treaty while withholding approval for a site to defend the capitol.⁴³ Because the Interim Agreement was designed to complement the ABM Treaty, it was designated as an executive agreement for which Nixon sought and received an endorsement from the Congress, with the vote being 88-2 in the Senate

and 307-4 in the House.⁴⁴ Both the ABM Treaty and Interim Agreement entered into force on October 3, 1972.⁴⁵

Antiballistic Missile (ABM) Treaty

The ABM Treaty limited the development and deployment of ABM systems. Article I committed the superpowers not to deploy ABM systems to defend their territories.⁴⁶ Not deploying ABMs would prevent the escalation of an expensive arms race as previously stated. It also banned the deployment of regional defenses (except as allowed by Article III) and the creation of a base for nation-wide defense, such as the deployment of a widespread network of ABM-capable radars, even if they were claimed to be for purposes allowed by the treaty.

Article III specified the limited deployments of ABM systems that are permitted by the Treaty, as well as banning all other deployments of ABM systems. Only two sites were allowed, of which the centers for the sites must be at 1300 km (800 miles) apart, in order to preclude the two sites from forming the basis of a national ABM system. Each site could only have a radius of 150 km, meaning that all systems and components must be inside this radius. The only allowed deployments at each site were fixed land-based ABM interceptor missiles and launchers. Each side was limited to 100 ABM launchers equipped with 100 ABM missiles. ABM radars were also limited in location (i.e., located only at specified ABM sites) and capacity (i.e., can only be used for ABM site defense).⁴⁷

This article also implicitly banned the deployment of futuristic ABM systems and components, such as those based upon laser or particle beams. Futuristic systems were permitted only if they were fixed and land-based. However, each side agreed that if

testing could lead to development of futuristic systems, deployment would be forbidden until specific agreements could be reached. Lastly, the treaty allowed for each side to deploy ABM systems to two sites. But the 1974 Protocol, discussed later in this chapter, reduced the number to one site for each side.⁴⁸

Article V banned mobile and releasable launchers. It prohibited the development, testing and deployment of all sea-based, air-based, space-based, or mobile ABM systems and components, as well as launchers capable of launching more than one missile at a time, or launchers capable of rapid reload. Mobile systems and components could be expanded beyond the single allowed deployment site, thus undermining the ban on nationwide or region-wide defenses. Reloadable systems would also undermine the treaty's limit of 100 launchers.⁴⁹

Article VI concerned non-ABM systems and components. Each party agreed to two main specifications. First, missiles, launchers, and radars other than ABM components were neither to be tested in an ABM mode, nor were they to be given the capabilities to counter strategic ballistic missiles while in flight. Second, each country was prohibited from deploying radars in the future for early warning of strategic ballistic missile attack except at locations along the periphery of its national territory and oriented outward.

This was the most difficult and complex article of the treaty to negotiate mainly due to US fears of Soviet capabilities. US strategist feared that the 10,000 plus Soviet surface-to-air missiles and supporting radars could be upgraded to have some ABM capability. The Soviets resisted any constraints that could have limited their radar-warning network, arguing that the treaty was to limit ABM systems, not non-ABM systems, thus there was no reason to limit the capabilities of non-ABM systems.

Additionally, the Soviets faced bomber threats from both the US and China, and devoted massive resources to their air-defense mission. They were determined to prevent the treaty from limiting the effectiveness of their ability to detect bombers from penetrating Soviet airspace.⁵⁰

Articles VII and VIII dealt with modernization, replacement and dismantlement. Article VII allowed each side to replace their ABM systems and components, as long as other treaty provisions were met. Both sides were free to develop and deploy more sophisticated ABM radars and faster missiles as long as they dismantled the outdated systems.

Article VIII committed each side to dismantle, as soon as possible, any excess ABM components beyond those allowed by the treaty. Article IX committed each side to not deploy ABM systems and components outside its national territory and not to transfer them or technical diagrams to other states.

Article XII and XIII covered verification and compliance. As a landmark concession, the Soviets, for the first time, explicitly accepted verification by means such as photo-reconnaissance, satellites, or electronic intelligence system once considered as espionage. Both sides agreed not to interfere with the other, and not to use deliberate concealment measures to prevent verification. As a result, the US possessed a greater confidence in its ability to detect Soviet weapons developments before they can pose a threat to US security.

Article XIII created the Standing Consultative Committee (SCC) to discuss treaty related issues. Meeting in secret, its main functions were to negotiate detailed provisions

for dismantling strategic forces, for removing ambiguities, and for settling compliance disputes. The SCC's applicability was to both the ABM Treaty and Interim Agreement.⁵¹

The Protocol to the ABM Treaty

In 1974, in a Protocol to the Treaty, the US and USSR introduced further restrictions on ballistic missile defense. The two superpowers agreed to limit themselves to a single site, instead of the two sites allowed by the Treaty. The Protocol enabled the US and USSR to dismantle or destroy current ABM sites and deploy new systems to the alternative area permitted by the treaty as long as proper advance notice is given. This action can only be accomplished one time. Once the alternative site system became operational, it must comply with the levels and requirements established in the treaty.⁵²

President Nixon and General Secretary Brezhnev signed the Protocol on July 3, 1974, in Moscow.⁵³ The Senate approved the Protocol by a 63-15 vote on November 10, 1975, with little controversy as the US had already limited itself to just one ABM site. In December 1974, Congress, in the Defense Appropriations Act, called for the closing of the one ABM site (except the perimeter radar) at Grand Forks, ND⁵⁴ The Protocol entered into force on May 24, 1976.⁵⁵ On October 9, 1992, the 10 member states of the Commonwealth of Independent States signed a resolution to fulfill the provisions of the treaty.⁵⁶

The Interim Agreement

The Interim Agreement was signed with the ABM Treaty on May 26, 1972, and entered into force on October 3, 1972. It had a life of five years, with an expiration date of 1977. Its name implied its objective: a temporary agreement to limit certain

categories of offensive arms until a more comprehensive treaty (known as SALT II) could be negotiated. The Interim Agreement did not cover MIRVed ICBMs or SLBMs, forward-based systems in Europe (such as the F-111), and strategic bombers, which were to be covered in SALT II.⁵⁷ Key articles of the Interim Agreement are provided below.

Article I prohibited the construction of additional land-based ICBM launchers after July 1, 1972. Article II prohibited the conversion of land-based ICBM launchers for light ICBMs or older types deployed prior to 1964, to heavy ICBMs of types deployed after 1964. Article III limited the number of SLBM launchers and ballistic missile submarines, both operational and under construction, as of the date of the Interim Agreement was signed. Article IV allowed for modernization and replacement of strategic ballistic missiles and launchers covered by the Agreement. Article V enabled verification by each country through the use of national technical means (mainly satellites). Further, each country was prohibited from interfering with the national technical means through deliberate concealment measures.⁵⁸

The Protocol to Interim Agreement

The Protocol to the 1972 Interim Agreement clarified Article III of the Interim Agreement, specifying exact numerical limits of certain nuclear weapons systems. The US and USSR were limited to no more than 44 and 62 modern ballistic missile submarines, respectively. Further, the US was limited to 656 SLBMs and the USSR was limited to 740 SLBMs on modern ballistic missile submarines until other SLBMs are destroyed or dismantled. After exercising full rights of substitution, the US would be limited to 710 SLBMs and the USSR to 950 SLBMs on modern ballistic missile

submarines. Lastly, it specified that deployment of modern SLBMs, regardless of type, will be counted against the total levels for each country.⁵⁹

Conclusions on the SALT I Treaty

SALT I was the first time in history that the superpowers discussed in real, concrete terms, the issue of nuclear weapons, weapons each country considered vital to its security. The treaty was the beginning of closer relations and brought the superpowers closer together. It was also the first treaty to limit strategic offensive arms and a costly arms race, which could have led to decreased stability and predictability between the superpowers. It also set the tone for future nuclear arms control treaties.

Senate ratification produced a dramatic result, the Jackson Amendment. Named after Senator Henry M. Jackson (D-Washington), the amendment required that any future permanent treaty on offensive nuclear arms “not limit the United States to levels of intercontinental strategic forces inferior to those of the Soviet Union, but rather be based upon the principle of equality.”⁶⁰ Its intent was clear—the US would be required to negotiate from a position of either equality or superiority, rather than inferiority, for future nuclear arms control treaties.

The ABM Treaty was based upon mutual realization that the deployment of ABM defenses would only continue an expensive arms race. If one side deployed an operational ABM system, the other side would surely do the same. With the deployment of ABM sites, each side would then develop and deploy a national ABM system, which would destabilize the military balance between the superpowers. Then, each side’s incentive for a first-strike would have increased, thus heightening the risk of a preemptive

strike leading to all-out nuclear war between the superpowers. The ABM Treaty, by its limitations on the number of ABM sites and prohibitions of a nation-wide ABM system, limited the arms race, decreased the first-strike option, and decreased the horrendous possibility of all-out nuclear war.⁶¹ Despite all it accomplished, the ABM Treaty nearly became history during the Reagan Administration, and yet may become history in the very near future, due in part to the Republicans in the 104th Congress.

In October 1985, the Reagan Administration suddenly announced a new interpretation of the Treaty. Article V was read as permitting development and testing of spaced-based lasers and particle beams, despite clear language which specifically prohibited development and testing of spaced-based weapons. This unilateral reinterpretation reversed the prior understanding of the treaty.⁶² Administration officials argued that exotic technologies are not systems and components as defined by the treaty, and thus not covered by Article V. Unfortunately, the Reagan Administration chose to use treaty ambiguities as the mechanism for the reinterpretation of the treaty, rather than use the Standing Consultative Committee, created by Article XIII, as a means of resolving ambiguities.⁶³ Fortunately, the Congress has emerged as a moderating factor, reducing the size of the Strategic Defense Initiative budget as well as passing legislation that greatly limited US efforts in developing and deploying exotic technology weapons in space, thus keeping the US in compliance with the treaty.

Several years passed before another threat surfaced to US compliance with the ABM Treaty. In reconciling different versions of the 1996 Defense Authorization Act, a House-Senate conference committee in 1995 included in a compromise bill a provision requiring the deployment of a national missile defense (NMD) system capable of protecting all 50

states from a limited ballistic missile attack by the year 2003. The bill passed both houses. But President Clinton vetoed it on December 28, 1995, citing the NMD plan among several provisions he opposed. In subsequent bargaining with the White House, Republican leaders agreed to drop the NMD language entirely and a revised bill won final approval on January 26, 1996, which the president signed into law.⁶⁴

On February 6, 1996, Senator Jesse Helms (R-NC), the chairman of the Senate Foreign Relations Committee, introduced a bill that would require the US to withdraw from the 1972 ABM Treaty with Russia and clear the way for deployment of a NMD system. Ironically, Senator Helms introduced the bill to coincide with Ronald Reagan's 85th birthday. Reagan championed a space-based missile defense system.⁶⁵

Now, the Russians have linked adherence to the ABM Treaty to their ratification efforts for the Strategic Arms Reduction Treaty II (START II). Russian officials have repeatedly emphasized the importance of strict adherence to the 1972 ABM Treaty as a prerequisite to their ratification of the START II Treaty.

Vladimir Lukin, Chairman of the Duma Committee for International Affairs, stated categorically, "We cannot reduce our strategic armaments in the absence of an undeviating and strict observance of the ABM Treaty, observance in letter and in spirit."⁶⁶ He also said a rejection of the 1972 ABM Treaty by the US Senate would torpedo any chances that Russia's Parliament will ratify the START II nuclear arms reduction treaty. He warned, "Ratifying (START II) in Moscow will be absolutely unrealistic if the United States unilaterally pulls out of the ABM Treaty."⁶⁷

Republican congressional staff personnel feel there is not enough support to pass a bill over a likely presidential veto, especially since many senators of both parties fear

withdrawal from the ABM Treaty would jeopardize ratification of the START II Treaty by the Russian legislature.⁶⁸ Thus the outcome of both US actions and Russian actions remains to be determined.

Strategic Arms Limitation Treaty II (SALT II)

As agreed in the SALT I negotiations, the US and USSR agreed to continue negotiations on a formal treaty with further limits on strategic forces. Negotiations began on November 21, 1972 and ended in 1979.

SALT II's objective was to establish equal, overall, quantitative limits on the bombers, ICBM, and SLBMs of each country, as well as establish limits on destabilizing new weapons such as MIRVs. During early negotiations, disagreements on both sides developed over the accountability of US forward-based systems (such as the F-111), French and British forces, Soviet forces targeted on Europe, and the Soviet heavy ICBMs.⁶⁹

Shortly after taking office, the Ford Administration concluded that new efforts were needed to conclude a lasting agreement that would slow the development of new technologies threatening the strategic balance and détente.⁷⁰ Secretary of State Kissinger visited Moscow in late October 1974, during which both countries accepted a compromise proposal that established equal numbers of delivery vehicles as well as those that could MIRV. After two days of negotiations in the city of Vladivostok in November, 1974, President Ford and General Secretary Brezhnev reached agreement on the basic outline of a SALT II Treaty that would limit strategic arms until 1985. Under this treaty, each side would be allowed to deploy 2400 SNDVs (bombers, ICBMs, and SLBMs), of

which 1320 could be MIRVed. In addition, both countries agreed to continue the ban on construction of new ICBM launchers. After considerable discussions, the US dropped its insistence on reductions in heavy Soviet ICBMs, which the Soviets had a decided advantage, while the Soviet Union gave up its demand for compensation for forward-based systems and British and French nuclear forces.⁷¹

However, the Vladivostok Accord failed to resolve key disagreements. The USSR wanted to count aircraft that carried cruise missiles as part of the 1,320 limit, while the US argued that the Backfire bomber was a heavy bomber which need to be included in the 2,400 limit. The new Carter Administration suggested limits lower than those agreed upon at Vladivostok as well as halting qualitative ICBM improvements.⁷²

Both countries compromised again between the Carter Administration's lower limits and the USSR's desire to remain within the Vladivostok limits. The compromise was ultimately agreed to by both countries. Finally, on June 18, 1979, in Vienna, Austria, President Carter and General Secretary Brezhnev signed the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Strategic Arms, known as the SALT II Treaty.⁷³

President Carter submitted the Treaty, a Protocol (which placed a temporary ban on mobile ICBMs and cruise missiles through 1981), 89 Agreed Statements and Common Understandings (which interpreted and clarified the Treaty and the Protocol), and a Joint Statement of Principles (which outlined guidelines for SALT III negotiation) to the US Senate for consent and ratification. It was to enter into force in 1979 and last six years.

However, the US Senate raised concerns that the treaty would adversely affect the US's ability to defend itself.⁷⁴ Coupled with the Soviet's December 1979 invasion of

Afghanistan, there was little chance of the Senate ratifying the treaty. Carter then asked the Senate to postpone ratification until January 1980. In March 1980, Carter stated that the US would abide by the treaty as long as the Soviets did as well.

With Reagan's election to the presidency in 1980, the future of US adherence became uncertain. During his campaign, Reagan suggested that he would not abide by SALT II, calling the treaty "fatally flawed."⁷⁵ In 1981, the US formally announced that it would not ratify SALT II. Later, on March 3, 1981, the Reagan Administration made its first public pledge to abide by the treaty. Reagan reaffirmed his commitment, stating on May 31, 1982, "As to existing arms agreements, we will refrain from actions which undercut them so as long as the Soviet Union shows equal constraint."⁷⁶

SALT II placed an overall limit on SNDVs, which was a key US objective. It limited the Soviets to 308 launchers for heavy (SS-18 and SS-9) ICBMs. It also limited the maximum number of warheads on missiles already tested, as well as limited warheads to 10 on the new ICBM missile and 14 for the new SLBMs. Air launched cruise missiles on heavy bombers were limited to 20, and the average load to new bombers to 28. Backfire bomber capabilities and production was limited to 30 per year. Key articles of the SALT II Treaty are provided below.

Article III limited an aggregate number of ICBM launchers, SLBM launchers, and air-to-surface missiles (cruise missile) to 2,400, and by January 1, 1981 to reduce this number to 2,250. Article IV prohibited each country from constructing additional ICBM launchers, relocating fixed launchers, converting light launchers to heavy launchers, and flight-testing or deploying new types of ICBMs after May 1, 1979. Article VIII prohibited flight testing cruise missiles with a range of over 600 km or converting non-

capable aircraft to carry cruise missiles. Article IX prohibited each side from testing or deploying ballistic missiles with a range over 600 km on waterborne vehicles except submarines, and not to deploy them on the ocean floor in orbit. It also prohibited testing or deploying mobile launchers of heavy ICBMs and cruise missiles with a range over 600 km that are equipped with MIRVed warheads.

Conclusions on the SALT II Treaty

While the US was abiding by the treaty, the Soviets took actions prohibited by the treaty. The Reagan administration provided evidence that the Soviets might or were in violation of certain prohibitions of SALT II. Specifically, the Soviets were charged with the following violations: testing and deployment of a new ICBM, the SS-25, which was in clear violation of the treaty's prohibition against testing and deployment of a second new ICBM; encrypting the telemetry data from the SS-25 tests; and failing to reduce its number of SNDVs from 2,500 to 2,250 (in fact, they added to their arsenal, reaching 2,520 SNDVs, while the US number slightly exceeded 1,900).

Additionally, the Soviets violated the 1972 ABM Treaty by building and operating a large phased-array radar at Krasnoyarsk. This radar violated the ABM Treaty in that it was not on the periphery of Soviet territory and that it did not face outward. This radar, and other large array radars indicate the Soviets were building a nation-wide ABM defense in violation of the ABM Treaty.⁷⁷

On May 27, 1986, President Reagan stated that the US in the future “would base decisions regarding its strategic force structure on the nature and magnitude of the threat posed by Soviet strategic forces and not on standards contained in the SALT structure,

which has been undermined by Soviet non-compliance.”⁷⁸ From a US perspective, SALT II was dead.

Reagan’s response to ending compliance with SALT II enabled the US to complete its strategic modernization program, which included the Strategic Defense Initiative, deployment of 50 MX ICBMs, and development of the Midgetman ICBM. He would also deploy air-launched cruise missiles on all 194 B-52s (whereas SALT II would have stopped the deployment at the 131st B-52), and conduct tests of cruise missile with the B-1 bomber and deploy these missiles on the bomber.⁷⁹

Intermediate Range Nuclear Forces (INF) Treaty

On December 8, 1987, a turbulent chapter in US-USSR arms negotiations ended with President Reagan and General Secretary Mikhail Gorbachev signing the Treaty between the United States of America and the Union of Soviet Socialist Republics on the elimination of their intermediate-range nuclear forces and shorter range missiles, which is widely known as the Intermediate Range Nuclear Forces (INF) Treaty.⁸⁰

The Treaty, two Protocols and one Memorandum of Understanding, were forwarded to the US Senate on January 25, 1988, and referred to the Committee on Foreign Relations the same day. The committee held public hearings on the Treaty in January, February and March 1988. Over 50 witnesses provided expert testimony, including senior Reagan administration officials, senior US military officers, and senior European parliament members.⁸¹ On May 25, 1988, the US Senate ratified the Treaty, voting 93-5.⁸² On June 1, 1988, the Treaty entered into force.⁸³

On the one hand, for many in the West, the INF Treaty vindicated the NATO strategy of deploy and negotiate from strength. NATO decided to deploy Pershing and ground-launched cruise missiles in Europe despite Soviet rhetoric that this would impede future negotiations. However, some in the West determined the treaty meant weakening of the US nuclear umbrella for the defense of Europe, resulting in inverse proportional increase in the risk of conventional attack by the Warsaw countries.

On the other hand, the Soviets saw the treaty as the successful culmination of an extended effort that dated back to the 1950s to prevent deployment of US land-based medium range nuclear missiles in Europe. These missile were capable of a rapid, little notice attack on vital targets in the western portion of the USSR, including Moscow, while ultimately keeping US strategic delivery systems in reserve. Soviet capability to deploy missiles in kind was extremely limited, although they deployed submarine launched missiles closer to the US.⁸⁴

The INF Treaty resulted in the elimination, meaning destruction, of all US and USSR ground-based ballistic and cruise missiles having a range from 500 to 5500 km, including missiles delivering conventional warheads. However, the Treaty did not include the nuclear warheads and guidance systems. By eliminating these missiles, the Congressional Budget Office (CBO) estimated that \$1.1 billion could be saved each year from lower numbers of military and civilian personnel and lower operating costs needed to maintain an INF missile arsenal.⁸⁵

In addition, the INF Treaty prohibited the production or flight testing of INF missiles, as well production of stages or launchers for other nations. Its procedures result in the destruction of associated equipment such as missile launchers, launch canisters,

erectors, transport vehicles, propellant tanks, and launch pad shelters, whether the equipment was deployed, stored or under repair. Some transporter equipment and storage shelters may be salvaged and used for other purposes.

Eight different types of missiles will be eliminated as required by the INF Treaty. US missile for elimination included the Pershing I and II, and the BGM-109G ground-launched cruise missile; USSR missiles included the SS-20, SS-4, SS-5, SS-12, SS-20, and SS-23. Each country will also eliminate a tested but non-deployed missile; the US missile being the Pershing 1B and the USSR missile being the SSC-X-4, of which the Soviets have 84 undeployed missiles for elimination.⁸⁶

Several key articles provided the overall basis of the Treaty. Article IV required the US and USSR to eliminate missiles, launchers, and associated equipment for missiles with a range of 1,000–5,500 km within three years of the treaty's entry into force. Article V required the US and USSR to eliminate missiles, launchers, and associated equipment with a range from 500–1,000 km within 18 months of the treaty's entry into force.⁸⁷ Article VI prohibited the production and flight-testing of intermediate range and shorter range missiles, as well as the production of stages and launchers for prohibited missiles. However, the launching of missiles was allowed only for destruction purposes.⁸⁸

The Protocol Regarding Inspections established procedures to implement the Treaty's on-site inspection requirements. These inspections were tied to the required exchanges of data, notifications and other information, and was designed to serve together with national technical means (satellite and other intelligence collection means) to verify compliance with the terms of the Treaty.⁸⁹

Treaty verification was enabled by four means: baseline inspections (on-site inspections conducted at locations listed in the MOU within three months of the treaty's entry into force), close-out inspections (inspections to observe that treaty-prohibited activities have ceased at those facilities), elimination inspections (observing the destruction of missiles and launchers at the elimination sites), short-notice inspections (a specific number of short-notice inspections per year at agreed locations for 13 years after the treaty), and portal monitoring (where US and USSR personnel continuously monitor one USSR and US plant, respectively).⁹⁰

Conclusions on the INF Treaty

Despite the elimination of these intermediate range missile, targets on both sides can be hit by easily retargeting strategic delivery systems or deploying additional systems. This meant, in reality, that the significance of the INF Treaty was more political than military. But for the US and its allies, there was a three-fold significance to the treaty.

First, it revealed how solid the NATO alliance was. In 1983, NATO began deploying Pershing and cruise missiles to counter growing Soviet power despite considerable public opinion to new nuclear deployments. Thus, the elimination of Soviet land-based missiles targeted against key European facilities was a direct consequence of the NATO solidarity.⁹¹

Second, with the Soviet's removing SS-20s from their active inventory, a key intimidating factor used to drive a wedge between the US and its European allies will be removed. At the same time, security of US allies in Asia was also improved as a result of the missiles being destroyed.⁹²

Third, the INF Treaty represented a somewhat significant change in the Cold War confrontations. By signing the treaty, the Soviets agreed to on-site inspections and asymmetrical reductions—key issues that eventually lead to negotiations on strategic arms reductions.⁹³

Despite the fact that the INF Treaty did not address the elimination of missiles having a range of over 5,500 km, both sides won. The US won in the political arena, showing the solidarity of NATO despite public opinion against the deployment of intermediate range missiles in Europe. The Soviets won in the military arena, such that the US deployed missiles on European soil, will be removed. Both side also made gains in security, as did Europe with less nuclear warheads on its soil and those targeted against its cities and people. Thus, the superpowers proved that arms reduction and elimination of part of the nuclear arsenal was possible. And by eliminating part of the arsenal, the stage was set for negotiations for reductions in strategic range delivery systems.

Strategic Arms Reduction Treaty I (START I)

The Treaty between the United States of America and the Union of Soviet Socialist Republics on the Reduction and Limitation of Strategic Offensive Arms, known as START I, was signed in Moscow on July 31, 1991, by President George Bush and General Secretary Mikhail Gorbachev. It was the end-product of a decade-long effort to reduce the large nuclear weapons arsenals of both the US and USSR.⁹⁴

President Bush transmitted the Treaty, two Annexes, six Protocols, and one Memorandum of Understanding to the US Senate for consent and ratification on November 25, 1991.⁹⁵ The US Senate Committee on Foreign Affairs held hearings in

February and March 1992, but hearings were delayed several months due to the demise of the Soviet Union. Unfortunately, the collapse of the Soviet Union occurred after the treaty was signed and transmitted to the Senate. New, independent nations of Kazakhstan, Russia, Belarus, and Ukraine possessed nuclear weapons of the former Soviet Union. Questions arose if the treaty was legally binding to these new nuclear weapon states, and whether the United States could be assured that reductions and limitations required by the treaty would actually be implemented by these states.⁹⁶

To address these concerns and others brought about by the dissolution of the Soviet Union, representatives from the United States, Kazakhstan, Belarus, Russia, and the Ukraine signed a Protocol to the Treaty in Lisbon, Portugal on May 23, 1992.⁹⁷ In the Protocol, these four new nuclear states assumed the former Soviet Union's obligations under the Treaty.⁹⁸ It also obligated Belarus, Kazakhstan, and Ukraine to adhere to the 1968 NPT as non-weapon states and to take necessary actions to that end.⁹⁹

President Bush transmitted the Lisbon Protocol to the Senate on June 19, 1992, for consent and ratification.¹⁰⁰ Hearings resumed in June 1992 after the signing of the Lisbon Protocol. Further debate was minimal due to the fact that the Soviet Union ceased to exist and that both President Bush and President Yeltsin agreed on June 17, 1992 to the basic principles of a second Treaty that would result in much deeper strategic arms reductions.¹⁰¹

Testimony on the Treaty from a military perspective was provided by the Chairman of the Joint Chiefs of Staff, the Army and Navy Chiefs of Staff, and the Chief of Naval Operations was unanimous in their support for the treaty. Each senior officer

summarized that the Treaty will enhance the security of the United States and the former republics of the Soviet Union as a result of the decrease in strategic offensive weapons.¹⁰²

On October 1, 1992, the Senate easily ratified the Treaty and all Protocols, with the vote being 93-6.¹⁰³ Kazakhstan ratified the Treaty on July 2, 1992; Russia ratified the Treaty on November 4, 1992; and Belarus ratified the Treaty on February 4, 1993.¹⁰⁴ Ukraine, the last remaining country, ratified the Treaty on November 16, 1994. With all five nations having ratified the Treaty, it entered into force on December 5, 1994, after all five countries exchanged the instruments of ratification.¹⁰⁵

Secretary of State James Baker provided the central thought of the START Treaty during Senate hearings on the Treaty, stating,

For as I think you will agree, START is critical to the end of the nuclear arms competition. . . . For the first time since the dawn of the nuclear age, we have agreed to real reductions in nuclear weapons levels, rather than setting limits on their rate of increase. In a very real sense, START is the means by which we will begin to turn back the nuclear clock, advancing both strategic stability and predictability.¹⁰⁶

Noting the fact that the world will become safer, Baker added, "With START ratification, the foundation of a safer world will be set in place and the prospect of nuclear Armageddon safely locked away."¹⁰⁷

The Treaty contained 19 articles, of which several provided the key details for offensive arms reduction. Article II set limits and sublimits of reductions for delivery vehicles, accountable warheads, and ballistic missile warheads to be reached over a seven-year period. Set limits were 1,600 deployed SNDVs (which included ICBMs, SLBMs, and bombers), 6,000 accountable warheads (which included 4,900 ground and sea-based ballistic missile warheads and 1,100 warheads on deployed mobile ICBMs).

Additionally, the Soviets were limited to 1,540 warheads on 154 heavy ICBMs. To meet this goal, the Soviets were required to eliminate 22 SS-18 launchers every year for seven years, going from 308 ICBMs to the required 154. Lastly, the Soviets were limited to a throw-weight ceiling of 3,600 metric tons, which is 54 percent of the current aggregate Soviet throw-weight level.¹⁰⁸

Article III specified rules for counting strategic ballistic missiles and their launchers, the warheads on these missiles, bombers, and air-launched cruise missiles. Each missile and its launcher, and each heavy bomber counted as one strategic nuclear delivery vehicle towards the 1,600 limit. Bombers equipped to carry short-range nuclear arms counted as one warhead against the 6,000 warhead limit regardless of how many short-range missiles were actually carried onboard.

Article IV set limits and provided details on non-deployed strategic systems. For example, each side is limited to 250 non-deployed mobile ICBMs, 75 bombers equipped for non-nuclear armaments, 20 test heavy bombers, and no more than five space launch facilities.¹⁰⁹

Article V prohibited the production, flight-test or deployment of heavy SLBMs; the production, flight-test or deployment of a new type of heavy ICBMs; or an increase of the launch weight or throw-weight of existing heavy ICBMs. It also prohibited ALCMs with multiple warheads, and ballistic missiles with more than 10 warheads. However, modernization and replacement of strategic offensive arms could be accomplished. Other prohibitions included basing of strategic offensive arms outside each country's national territory, and the production, testing and deployment of launchers in the atmosphere, sea bed, or placing nuclear weapons in any earth orbit.

Verification is detailed in Articles VIII–XII. These articles provided for regular data exchanges, 12 types of on-site inspections, cooperative measures, non-interference with national technical means (specific measures to hide or distort information that is gained from satellites), and non-coding of missile telemetry data.

The estimated budgetary impact of the START I Treaty was gigantic. In responses to the Senate Foreign Relations Committee Chairman's requests for possible budgetary impact of implementing the Treaty, the Director of the CBO, in his January 23, 1992, response to the Chairman estimated that a reduction to 3,000 warheads "could directly save \$46 billion in the next five years, and \$130 billion through 2010. These savings average to about \$9 billion a year for the next 15 years."¹¹⁰ CBO provided additional estimates of saving \$4 billion more per year if the number of warheads were reduced to 1,000, with a total of \$13 billion a year. CBO estimated the cost to implement and verify the START Treaty to be minuscule compared to the savings, being about \$150 million per year.¹¹¹

Conclusions on the START I Treaty

Without a doubt, START I played a major role in increasing the security of the United States. START I became the first arms control treaty in which both superpowers actually reduced their inventory of strategic offensive forces (the INF Treaty reduced ground-launched offensive systems with a range of 500–5,500 km). The ceiling of 6,000 deployed weapons per country would reduce the strategic delivery of each country between 20–35 percent.¹¹² It also placed exact limits on the Soviet SS-18 ICBM. It did,

however, give relatively lenient treatment to warheads carried on bombers, which unlike missiles contribute to stability due to their ability to be recalled after launch.

Secondly, START I assisted in nonproliferation goals set forth by the 1968 NPT. The 1992 Lisbon Protocol required Belarus, Kazakhstan and Ukraine to eliminate their nuclear weapons within seven years of ratification, thus reducing the number of nuclear-weapons states. Thus, the US and Russia can argue that they are fulfilling their obligations with Article VI of the NPT.

Third, START I, with its detailed requirements and verification mechanisms, established the framework for a de-MIRVing treaty (which was included in START II). This treaty hoped to reduce the number of deployed strategic weapons which in turn reduces the number of warheads from 7,000 to 9,000 allowed by START I to between 3,000 and 3,500.¹¹³

However, START I did not fulfill many obligations some held for arms control. The treaty's mandated force reductions would only be as half as great as the 50 percent reductions that President Reagan and General Secretary Gorbachev envisioned at the 1986 Summit in Reykjavik. The Treaty returned the levels of the nuclear arsenals of the superpowers to their 1982 numbers, and no more.¹¹⁴ Thus, START I set the stage for continuing negotiations for deeper reductions in strategic offensive arms.

Strategic Arms Reduction Treaty II (START II)

The Treaty Between the United States of America and the Russian Federation on Further Reduction and Limitation of Strategic Offensive Arms, known as START II, was signed by President George Bush and Russian President Boris Yeltsin on January 3, 1993,

in Moscow.¹¹⁵ START II involved only the US and Russia, whereas START I involved five countries—the US, Russia, Kazakhstan, Belarus, and the Ukraine. The last three countries have been obligated under the 1992 Lisbon Protocol to the START I Treaty to eliminate all SNDVs within their borders.

START II was born during the final stages of START I in which President Bush and President Yeltsin agreed on June 17, 1992 to the basic principles of a second treaty that would result in much deeper strategic arms reductions.¹¹⁶ The new treaty would build upon START I to further reduce the number of strategic delivery systems and warheads.¹¹⁷

On January 15, 1993, President Bush transmitted the Treaty and related documents to the US Senate.¹¹⁸ On May 11, 1993, the Senate Committee on Foreign Affairs began formal hearings, with Secretary of State Warren Christopher being the first Clinton Administration member to testify. Christopher told the committee that the “ratification and implementation of the pact would enhance strategic stability, foster transparency and openness, and eliminate first strike capabilities and strategies of a bygone era.”¹¹⁹ He also stated that the treaty will have benefits for Russia, in that it would avoid the future burden to invest large sums of money for development of new weapons and maintenance of the current strategic force level.¹²⁰

After significant delays by the committee to keep the treaty from a vote in an unrelated effort to force a reorganization of the State Department, the Senate on January 26, 1996, voted 87-4 for ratification.¹²¹ Both President Bush and President Yeltsin echoed their sentiments after signing the Treaty. Bush stated that START II “means a future far from fear.”¹²² Yeltsin added that START II “goes further than all other treaties

signed in the field of disarmament . . . we will be able to hand over to . . . the children of the 21st century a more secure world.”¹²³

Article I set numerical limits on US and Russian warheads deployed on SNDVs, (which included ICBMs, SLBMs, and heavy bombers). Reductions are scheduled to be accomplished in two phases. Phase I, to be completed within seven years after the Treaty’s entry into force, requires the US and Russia to deploy no more than 3,800 to 4,250 warheads on SNDVs. Of these numbers, no more than 2,160 warheads can be deployed on SLBMs, no more than 1,200 warheads on deployed MIRV-capable ICBMs, and no more than 650 warheads on Soviet SS-18 ICBMs.

Phase II reductions are required to be completed by the year 2003. At that time, the US and Russia can each deploy no more than 3,000 to 3,500 strategic nuclear warheads. Of this number, no more than 1,700 to 1,750 warheads can be deployed on SLBMs. Each side was also prohibited from producing, flight testing, or deploying any land-based MIRVed missile except as specified by other provisions of the treaty.

Article II continued missile elimination and silo conversions, with rules from START I still being applicable. Under START II, all deployed and non-deployed SS-18 missiles and their launch canisters were to be destroyed.

Article IV provided new guidance concerning bombers and number of nuclear weapons they carried. Unlike START I in which bombers are counted as one warhead regardless of how many they are carrying, START II requires bombers to be counted as the number of warheads with which they are actually equipped. Additionally, each side can exempt up to 100 bombers from the warhead limits by changing their mission from a nuclear to conventional role. Bombers with a changed mission cannot be based within

100 km of nuclear storage areas, and must have observable differences from bombers with a nuclear mission. Lastly, aircrews of bombers with a changed mission are prohibited from training or conducting exercises for nuclear missions.

Article V covered verification, specifically all verifications provisions of START I apply to START II, except where explicitly stated otherwise in the treaty.¹²⁴

Conclusions on the START II Treaty

Like its recent cousin (START I), START II, when fully implemented, will play an even bigger role in the security of the United States and the world. START II will result in much deeper reductions in strategic offensive weapons than START I, resulting in US and Russia returning to the level of warheads they had deployed in the 1960s and 1970s, respectively.

Secondly, the START II ban on MIRVed weapons will improve the stability of the US and Russian relationship. With these weapons destroyed, the incentive need for a first-strike launched by either side will be greatly reduced or even eliminated. In relation to MIRVed weapons, the US will have achieved a key goal with the elimination of Russian SS-18 missiles, which the US considered the most lethal in the Russian inventory.

Third, the signing of START II should convince skeptical non-weapons states that the US and Russia have met the intent of Article VI of the 1968 NPT for good faith negotiations for deep arms reductions. The number of weapons remaining after full START II implementation will be well below the level the US had when it signed the

NAT in 1968. Hopefully, other nuclear weapons states (Britain, France, and China) will take similar actions to reduce their nuclear arsenals as well.

Despite its potential positive effects, START II's future looks uncertain. On the US side, the Treaty was easily ratified despite a three year delay. In contrast, President Yeltsin faces a much tougher fight as some members of the Russian parliament, the body that is responsible for treaty ratification, have warned that they intend to scrutinize START II's impact on Russian security in great detail. On January 10, 1993, Ruslan Khasbulatov, the speaker of the Russian legislature, added his warnings that the parliament would not act as a rubber stamp, stating "the legislature will not automatically ratify such a complex treaty just because it has already been signed."¹²⁵

The current legislature, which was elected in December 1995, is more opposed to Yeltsin than the previous one, thus obtaining votes for ratification will be extremely difficult. And being at odds with Yeltsin, the legislature will probably not take action on the Treaty until after the June 1996 Russian presidential elections.¹²⁶

Despite the new legislature, Yeltsin stated that he would work hard to secure ratification by April 1996 when President Clinton and other Western leaders visit Moscow for a nuclear security conference.¹²⁷ However, the Russian legislature has linked ratification of START II to the 1972 ABM Treaty and recent congressional efforts to force the Clinton Administration to develop and deploy an NMD system, which the Russians state would be a violation of the ABM Treaty.

Despite increasing odds against Russian ratification, Yeltsin is committed to seeing the treaty ratified. By doing so, he can preserve the strategic stability between the US and Russia, as well as convince the Russian people that their security is not in doubt. And

both countries can more strongly argue that they have fulfilled the intent of Article VI of the 1968 NPT.

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Chapter 4

Analysis

US nuclear policies, strategy, and treaties are bound together and define the course of America's strategic direction. It's a path that can lead to either global stability or Armageddon. From the days of the Eisenhower administration to the present, factors such as nuclear arsenal capabilities, costs, and world opinion have driven changes in policy as well as dictated treaty negotiations. The fact that nuclear treaties and policies are linked is a constant. What has changed throughout the years is the identifiable driving force behind US policies and treaty negotiation.

1960s

The 1960s marked the first decade in which the US began to look at and seek treaties that would impact nuclear weapons. Factors impacting the thought process of the National Command Authority were US and Soviet nuclear strength, nuclear force structure, world issues, and internal economics.

During the 1960s, the US had a distinct advantage over the Soviet Union as a nuclear power. US force structure was built on the concept of a triad with the bomber force being the primary leg. In contrast, the Soviet Union depended more heavily on their ICBM force.

In the world environment, the sixties could be considered the decade of proliferation. The US and Soviet Union had enjoyed the luxury of a bipolar world, being the only nuclear states throughout much of the fifties. During the 1960s, the spread of nuclear technology and weapon building capability began to shake a somewhat stable environment. This situation, when coupled with an escalated arms race following the Cuban Missile Crisis, initiated thoughts on the first round of treaties impacting nuclear weapons—the Nonproliferation Treaty and SALT I, which included the ABM Treaty.

During the 1960s, the link between US nuclear policy and treaties was nuclear strategy—protection of the “Assured Destruction” policy. The US considered itself at an advantage in a nuclear confrontation with the Soviet Union and sought treaties stabilize or “freeze” this situation. As stated in chapter three, the NPT would reduce the need for defense against peripheral attacks as well as minimizing the threat of a “small” nuclear war escalating. More importantly, the ABM Treaty was designed to reduce a threat against our current policy. If an effective ABM system were deployed, it could eliminate the US’ ability to guarantee “Assured Destruction.” Finally, the SALT I treaty acted as a cap on nuclear weapons. The US considered a limit to be to its advantage due to its technological superiority. With these treaties in place the US “Assured Destruction” policy could be maintained and the cost of the arms race would be reduced.

1970s

Early in the 1970s the factors that impacted US nuclear policy began to change. World events and internal economics shifted the US focus away from nuclear issues allowing the Soviet Union’s nuclear forces to close the gap on US superiority.

In the early 1970s, the US military and National Command Authority were completely emerged in the Vietnam War. Nuclear policy remained constant throughout the Nixon and Ford administrations with a policy of “Assured Destruction” and continued push toward arms limitation. The ABM and SALT I Treaties passed in 1972, with an agreement for future talks in the near future (SALT II).

Although President Nixon considered modernization as one of his three problem areas to address as part of his nuclear policy, little action was taken to upgrade US systems after 1974.¹ In contrast, the Soviet Union was involved in a dramatic upgrade of systems which began in the 1960s. The Soviets had constructed over 750 hardened silos for upgraded MIRVed ICBMs, upgraded their 950 SLBM launchers, and deployed over 200 new bombers.²

The upgrades in Soviet capability coupled with the slowed US modernization effort led to an identified loss of parity. By 1975, the Soviet Union had surpassed the US in both ICBM and SLBM RVs and was closing the gap on intercontinental-capable bombers.³ As a result, the US was forced to reevaluate its nuclear policy and strategy.

The NPT, ABM, and SALT I treaties all acted as instruments to ensure the US policy of “Assured Destruction” remained valid. As the Soviet modernization efforts began to take fruition in 1972, the two superpowers began to negotiate SALT II. The loss of strategic advantage by the US forced the Ford and Carter administrations to negotiate from an equal if not disadvantaged position. Secretary of Defense James Schlesinger summarized a shift in US thinking by stating “seeking in SALT II to ensure that the principle of essential equivalence is upheld.”⁴ It was now apparent negotiations had shifted from a supporting role in US strategy and policy to a necessity.

1980s

Strategic modernization and strong defense characterized the Reagan era in the 1980s. The administration began a three phased approach—unveiling a new nuclear policy, procuring new weapon systems, and pushing towards arms reduction treaties.

As stated in chapter 3, President Reagan openly opposed the SALT II treaty feeling it left the US in a strategic disadvantage. Following his election, the Reagan administration published its “Prevailing Strategy” setting a new direction for US nuclear strategy. The strategy, which emphasized the US could prevail in a nuclear exchange, demanded the US reach nuclear parity if not superiority with the Soviet Union.

After establishing the new strategy, the Reagan administration began a massive modernization effort. Just as the Soviet modernization effort of the 1960s and 1970s had a destabilizing effect on the US, the US modernization of the 1980s led to significant unrest in the Soviet Union. The upgrades outlined in chapter 2 accelerated the decline of a weakening economy as the Soviet Union tried to keep pace.

Economic decline was not the only problems the Soviet Union faced. During the US buildup, the Soviet leadership changed hands four times. In addition, the Soviet’s “Vietnam,” Afghanistan, tarnished the image of its military. Finally, the Chernobyl disaster brought an international focus on Soviet nuclear programs.

With all this going on, the Reagan administration added a new wrinkle to US nuclear strategy. Following numerous Soviet violations of the SALT II Treaty, the US announced a new interpretation of the 20 year old ABM treaty. Chapter 3 outlined the administration’s loose interpretation of the treaty—an interpretation that allowed for possible testing of a new system. What is significant about this act is the US was

beginning to *aggressively* use treaties as part of its nuclear strategy. This was not the only incident where treaties were becoming an integral part of strategy. The US deployment of Pershing II intermediate-range ballistic missiles in Western Europe was an overt attempt to bring the Soviet Union to the bargaining table. This move led directly to the 1987 INF Treaty. These actions validated a statement made in 1973 by Secretary of Defense Richardson: “the three principles of strength, partnership and a willingness to negotiate are inextricably linked,”⁵ Richardson refers to sufficiency of strength, allies, and negotiations with the Soviets.

The final element of the Reagan strategy involved pursuing the first nuclear arms reduction agreement. The ability to negotiate from a position of strength enabled the US to lay the foundation for a nuclear arms reduction treaty early in the 1990s.

The 1980s clearly showed when negotiating from a position of strength, treaties can be used to further national interests. The US was exposed to this concept early in the 1970s when the Soviet Union was able to negotiate favorable treaties (SALT I & II). The Reagan administration’s three phased approach of establishing a strategic goal, maintaining a formidable military power, and negotiating treaties that further national interests proved to be an effective systematic approach.

1990s

The US rolled into the 1990s facing a new world. Following the breakdown of the Berlin Wall, US-Soviet relations vastly improved allowing the US to continue its drive for arms reduction while focusing on proliferation concerns worldwide.

In the 1990s, the Bush administration encountered unexpected events which had dramatic events on world stability. Desert Shield/Desert Storm acted as a showcase for US military power. The technology employed in the desert increased the stature of both US conventional and nuclear arsenals. This event coupled with the break-up of the former Soviet Union left the US as the sole superpower in the world.

From this position, the Bush and Clinton administrations continued the arms negotiations started in the 1980s. The START I and II Treaties (see chapter 3) will reduce the US nuclear arsenal by over seventy percent. In addition, improved relations between the US and Soviet Union led to removing the bomber force from twenty-four hour alert and “detargeting” ICBMs and SLBMs.⁶

What is most significant in the 1990s is the US strategy “Lead but Hedge.” The Nuclear Program Review acted as a validation of the policies and strategies employed in the 1980s placing the US as the dominant nuclear power. Using the three phased approach—strongly linking strategic policy, weapons development and procurement, and treaty negotiations—the Clinton administration continues to drive the world agenda in nuclear policy. The administration has the luxury of initiating arms reduction talks and action—“leading.” The dominant position, earned through modernization and weapons upgrade, allows the US to “hedge” or maintain the ability to quickly rearm if needed. Secretary of Defense William Perry summarizes the policy as follows, “This means Washington will use arms reductions to try to induce Russia to agree to additional cuts, but at the same time, it will maintain the ability to respond forcefully to a future strategic threat, should it emerge.” This statement is an indication that the US will continue to use a strong nuclear capability coupled with treaties and negotiations to further its policy.

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Chapter 5

Conclusions

When examining the history of US nuclear policies, strategy, and treaties, it is apparent they are linked in every case. However, what could be considered disturbing is the variety of relationships found throughout the life-span of America's nuclear arsenal. A constancy of purpose is needed to systematically develop US nuclear strategy.

Chapters 2 and 4 outlined how the National Command Authority continuously adjusted the strategy and policy of US nuclear forces. Although the overriding objective has always been deterrence, the US has attempted to deter through different means. US administrations have failed to use a systematic approach linking goals, force structure, and treaties to a desired end state.

Following the disintegration of the Soviet Union, two schools of thought have surfaced regarding the future of nuclear weapons. The first, the marginalisers, site as the only superpower the US is in position to lead the world towards total disarmament of nuclear weapons.¹ In contrast, the traditionalists feel nuclear weapons should continue to play a role in US national security.²

Elimination of all nuclear weapons would be a noble goal for the US, however, is this an achievable goal? By completely eliminating the US nuclear capabilities, the US may place itself or other nations at risk. Even today, the US cannot be certain how many

nations have nuclear weapons in their inventories. In addition, the knowledge required to develop nuclear weapons is widespread. These two facts make it reasonable to conclude the US is incapable of guaranteeing worldwide disarmament in the short term (five to ten years).

If the US is currently incapable of eliminating nuclear weapons, US leadership must define the weapons long term role in national security. This long term role must aim at a desired end state. Beyond deterrence, which is a short term objective, does the US want to push towards disarmament or superiority? Without a long term goal of superiority or disarmament, weapons development and treaties will act in conflict with one another. In the 1960s, US weapons development and deployment were used to maintain superiority over the Soviet Union. Superiority was lost due to a change in long term direction in the 1970s. Treaties designed to increase stability actually placed the US in a nuclear disadvantage. This trend was reversed in the 1980s, but at a great expense to the national budget.

When leadership has identified the long term US nuclear policy, only then can the proper mix of force structure and treaty negotiations be planned. If the US has learned from history, US leadership must maintain superiority in nuclear capability if they are to dictate terms of future nuclear treaties. This relationship requires the US to maintain a robust strategic nuclear capability into the near future.

The three phased approach, identifying *long term* nuclear policy tied to an end state, maintaining a superior force structure, and negotiating from a position of strength has proven effective by both the US and Soviet Union. This systematic approach to nuclear policy becomes even more critical in a period of uncertainty. Without the direction

established by long term nuclear policy, the US will at best waste valuable resources and money and at worst face a global disaster.

Notes

¹ Stephen A. Cambone and Patrick A. Garrity, *The Future of US Nuclear Policy*, (*Survival, The IISS Quarterly, Volume 36/No. 4, Winter 1995–96*), 75.

² Cambone and Garrity, 76.

Glossary

ACDA	Arms Control and Disarmament Agency
AEC	Atomic Energy Commission
ABM	Antiballistic Missile
ALCM	Air-Launched Cruise Missile
C3	Command, Control, and Communications
CBO	Congressional Budget Office
CJCS	Chairman, Joint Chiefs of Staff
ICBM	Intercontinental Ballistic Missile
INF	Intermediate Range Nuclear Forces
JCS	Joint Chiefs of Staff
JSTPS	Joint Strategic Targeting and Planning Staff
LNO	Limited Nuclear Options
KM	Kilometers
MAD	Mutual Assured Destruction
MAS	Mutual Assured Safety
MIRV	Multiple Independently Targeted Reentry Vehicle
NATO	North Atlantic Treaty Organization
NMD	National Missile Defense
NPT	Nonproliferation Treaty
NSC	National Security Council
NSDM	National Security Decision Memorandum
NSSM	National Security Study Memorandum
NSTL	National Strategic Target List
NPR	Nuclear Posture Review
NUWEP	Nuclear Weapon Employment Policy
PD	Presidential Directive
PDD	Presidential Review Directive
SAC	Strategic Air Command
SALT	Strategic Arms Limitation Talks
SALT I	Strategic Arms Limitation Treaty I
SALT II	Strategic Arms Limitation Treaty II
SCC	Standing Consultative Committee
SDI	Strategic Defense Initiative
SIOP	Single Integrated Operational Plan
SLBM	Submarine-Launched Ballistic Missile
SNDV	Strategic Nuclear Delivery Vehicles
START I	Strategic Arms Reduction Treaty I

START II	Strategic Arms Reduction Treaty II
UN	United Nations
US	United States
USSR	Union of Soviet Socialist Republics
WMD	Weapons of Mass Destruction

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